

REVIEW
DIAGRAMS.

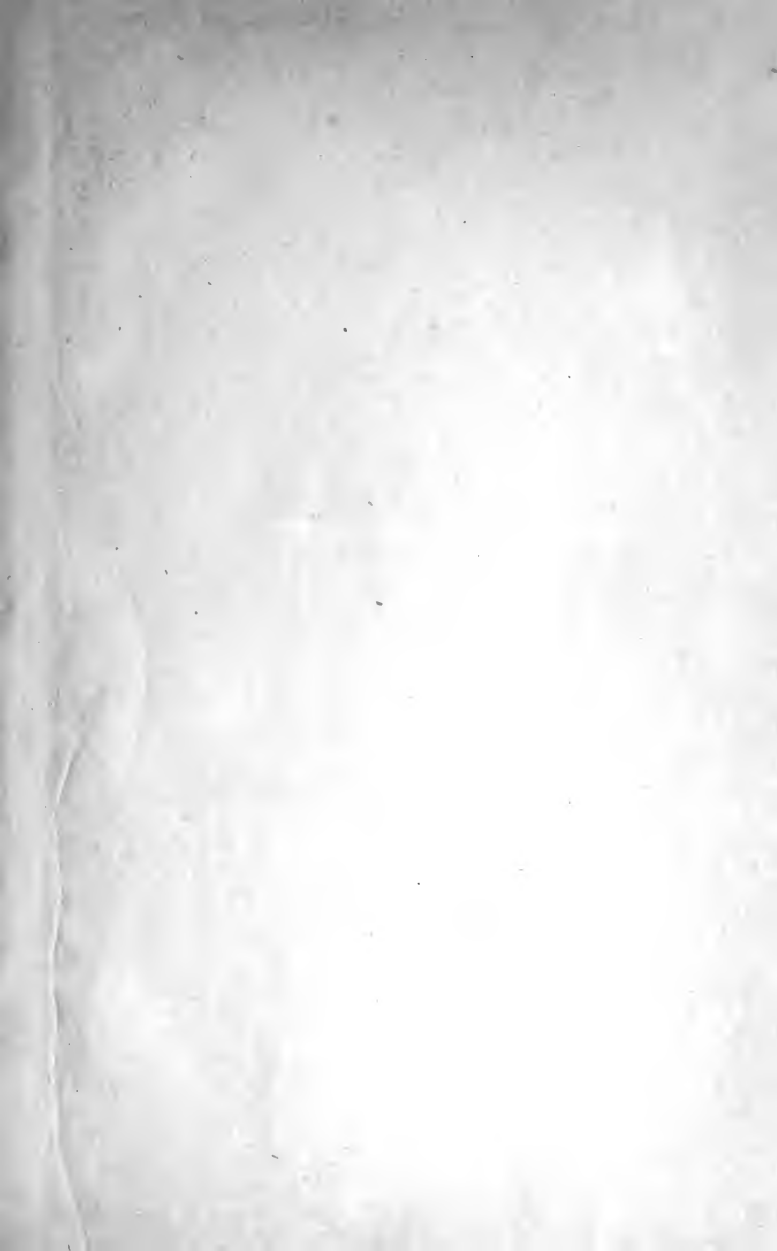
HUMPHREY.

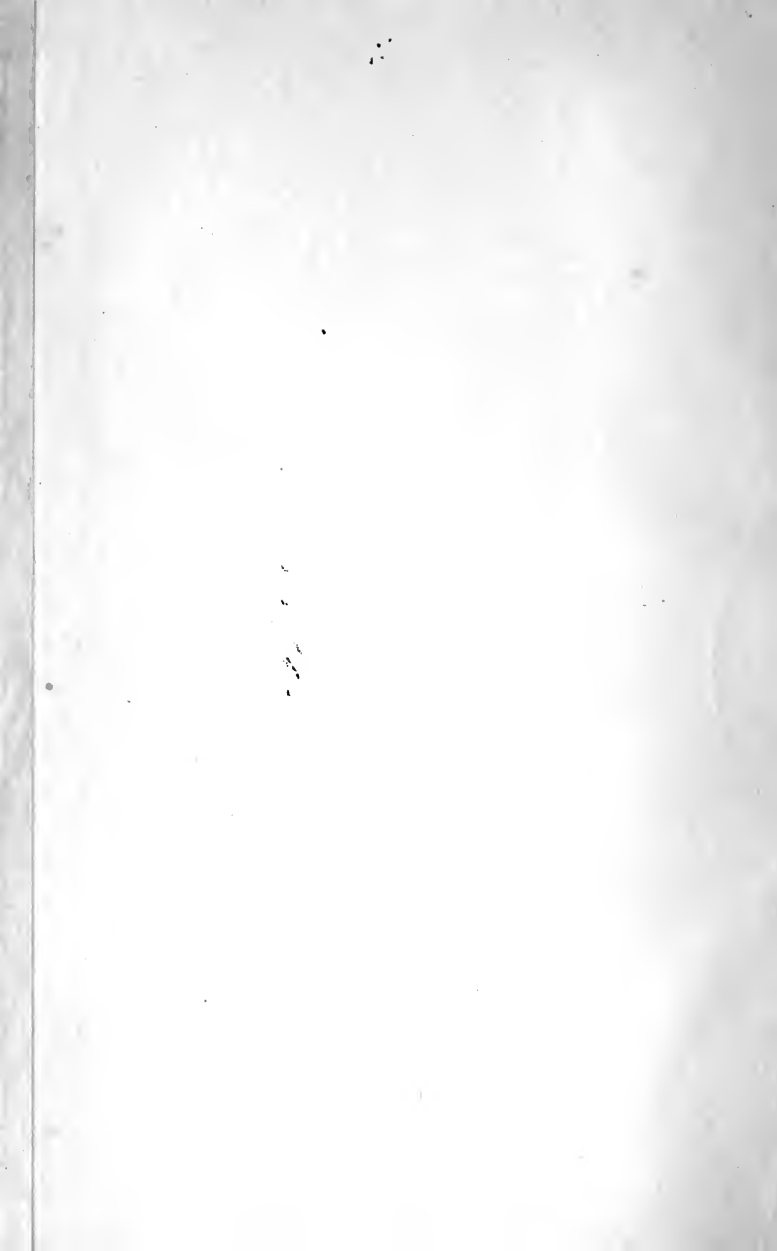
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UNITED STATES OF AMERICA.





REVIEW DIAGRAMS

REVISED AND ENLARGED.

THIRD EDITION.

AN OUTLINE

— OF —

U. S. History, Civil Government, Geography, Grammar,
Reading, Orthography, Theory and Art of Teaching,
Arithmetic, Physiology and Penmanship.

BY J. W. HUMPHREY,

Author of "Manual of Reading."

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BY

JAMES W. HUMPHREY.

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PREFACE.

TO FIRST EDITION.

THIS BOOK is intended for the use of those who desire to review, and, at the same time, to offer to the young teacher black-board work which, if intelligently handled, cannot fail of good results. The "Diagrams" have grown out of the belief that "illustration is the basis of successful teaching," and that what is seen is best understood. They were prepared for my own class work, but, by the request of many of my fellow teachers and pupils, I have consented to have them published, with the hope that they may assist in making the recitation hour both pleasant and profitable.

PREFACE TO SECOND EDITION.

The reception given the first edition, and the many kind words for the "Diagrams" by successful teachers, is our apology for offering the public a second edition. The latest and most reliable authorities have been consulted in compiling and revising this work. May the hope that it will facilitate the labors of both teacher and student not be in vain, is the wish of the author.

PREFACE TO THIRD EDITION.

To this edition the subjects of Orthography and Theory and Art of Teaching have been added. The subject of Reading entirely re-written, and in other subjects some important changes have been made. We are indebted to many of our fellow teachers for valuable suggestions. With the hope that this little book may be found useful and worthy a place on the true teacher's table, the author submits it to the public.

SUGGESTIONS.

The object of this book is to furnish an outline for Review and to offer Blackboard Work to the young Teacher. Events standing alone are of little educational value. In the "Diagrams," subjects are grouped together, thus aiding the memory by helping the intelligence. They are intended to be suggestive rather than complete.

UNITED STATES HISTORY.

PERIODS—

Aboriginal, to 986.
Voyage and discovery, 986 to 1607.
Colonial, 1607 to 1775.
Revolutionary and Confederation, 1775 to 1789.
National, 1789 to 1888.

ABORIGINAL, to 986.

Mound Builders—Indians—Esquimaux.

Name.
Origin.
Tribe.
Customs.
Language.
Implements.
Writing.
Number.

VOYAGE AND DISCOVERY, 986 to 1607—

Norsemen.
Spanish.
English.
French.
Dutch.

NORSEMEN—

Herjulfson, 986.
Leif Erickson, 1001.
Thorwald Erickson, 1002.
Thorstein Erickson, 1005.
Thorfinn Karlsefne, 1007.

SPANISH—

Columbus, 1492, 1493, 1498, 1502.
Vespucci, 1499, 1501.

SPANISH—CONTINUED.

Ponce de Leon, 1512.
De Balboa, 1513.
Cortez, 1519-1521.
Magellan, 1520.
De Soto, 1541.
Melendez, 1565.

ENGLISH—

The Cabots, 1494-1497.
Drake, 1579.
Gilbert, 1583.
Raleigh, 1584.
Grenville, 1585.
Gosnold, 1602.
Pring, 1603.

FRENCH—

Denys, 1506.
Verrazzani, 1524.
Cartier, 1534.
Roberval, 1542.
Laudonniere, 1564.
De Gourges, 1566.
La Roche, 1598.
Champlain, 1603, 1605.
De Monts, 1604.

DUTCH—

Henry Hudson, 1609.

COLONIAL SETTLEMENTS.

SPANISH—

Isthmus of Darien, 1510.
St. Augustine, 1565.
Santa Fe, 1582.
San Diego, 1769.

ENGLISH—

Jamestown, 1607.
Plymouth, 1620.
Salem, 1629.
Rhode Island, 1636.

FRENCH—

Port Royal, 1605.
Quebec, 1608.
Detroit, 1701.

DUTCH—

New York, 1623.

Ft. Orange or Albany, 1624.

COLONIAL EVENTS.

VIRGINIA—

Name; London Company, 1606; Jamestown; Wingfield; Smith; Pocahontas; Powhatan; "Starving Time;" Delaware; Slavery; Argal; Opechananough; Berkley; Bacon; Charters; Royal Government.

MASSACHUSETTS—

Name; Plymouth Company, 1606; Roger Williams; John Winthrop; Carver; Miles Standish; Anne Hutchinson; John Robinson; Five Nations; Witchcraft; George Burroughs; Harvard College, 1637; Charters; Royal Governments; Pine Tree Money, 1652; Paper Money, 1690.

NEW YORK—

Name; Dutch Governors; Peter Stuyvesant; May; Minuit; Wouter Van Twiller; Andros; English Rule; Fletcher; Leisler; Melborne; Slaughter; Negro Plot; Columbia College; Government.

CONNECTICUT—

Name; Three Colonies; Lord Say-and-Seal; Lord v Brooks; Hampden; Winthrop; Yale College, 1702; Charter Oak; Charter; Royal Government.

MARYLAND—

Name; Lord Baltimore; Josiah Fendal; Clayborne; Calvert; Religious War; Charter; Royal and Proprietary Governments.

RHODE ISLAND—

Name; Roger Williams; Clark; Coddington; Henry Bull; Brown University; Charters; Governments.

CAROLINAS—

Name; Three Colonies; Raleigh; Amidas; Barlow; Seth Sothel; Lord Clarendon; Sayle; Indian Massacre; Indian War; Rice Culture, 1694; Separation, 1729; Proprietary and Royal Governments.

NEW JERSEY—

Name; New Netherlands; East and West Jersey; Duke of York; Berkley; Carteret; Sale of West Jersey (1674) and East Jersey (1682) to the Quakers; Governments

PENNSYLVANIA—

Name; Penn.; Benj. Franklin; Swedes; Quakers; Philadelphia; Charter of Liberties; Treaty with the Indians; Charter; Government.

DELAWARE—

Name; Swedes; Gustavus Adolphus; Peter Minuit; "The Territories;" Charter; Government.

GEORGIA—

Name; Territorial Claims; Oglethorpe; John and Charles Wesley; Whitefield; Hostilities with Spaniards; Trustees; Government.

NEW HAMPSHIRE—

Name; Laconia; Ferdinand Gorges; Mason; Wheelwright; Conflicting Land Claims; Indian Wars; Government.

FRENCH AND INDIAN WARS.

King William's War.

1689 to 1697.

CAUSE—

English Revolution of 1688-1689; King William versus Louis XIV., and James II.

EVENTS—

Dover, N. H., massacre, June 27, 1689; Schenectady, N. Y., massacre, Feb. 9, 1690; Salmon Falls, Maine, massacre, March 28, 1690; Casco Bay, Maine, massacre, May 21, 1690; Nova Scotia expedition, May 1690; Canada expedition, October, 1690; Oyster River, N. H. massacre, July 25, 1694; Haverhill, Mass., massacre, March 25, 1697.

RESULT—

Confirmation of King William to English Throne; Territory in U. S. to remain unchanged; Treaty of Ryswick, Sept. 20, 1697.

Queen Anne's War.

1702 to 1713.

CAUSE—

Spanish Succession; England versus France; Queen Anne versus Louis XIV.

EVENTS—

St. Augustine expedition, May, 1702; Appalachian expedition, December, 1702; Attack against Charleston, 1706; Tuscaroras war, 1712; Yamassee war, 1715; Port Royal expedition, 1710; Canada expedition, 1711.

RESULT—

Confirmation of Phillip V to the Spanish throne; Acadia ceded to England; treaty of Utrecht April 11, 1713.

King George's War.

1744 to 1748.

CAUSE—

Austrian Succession; England versus France; George II versus Louis XV.

EVENTS—

Capture of Louisburg, 1745; D'Arville expedition, 1746.

RESULT—

Confirmation of Maria Theresa to the Austrian throne; territory in U. S. restored; treaty of Aix la Chapelle, Oct. 18, 1748.

French and Indian War.

1754 to 1763.

CAUSE—

Territorial dispute; George II and Colonies versus Louis XV.

EVENTS—

Washington's journey, 1753; Ft. Du Quesne built, 1754; Battle of Great Meadows, 1754; Ft. Necessity captured, July 4, 1754; Braddock's defeat, July 9, 1755; Shirley's expedition, 1755; battle of Lake George, 1755; capture of Oswego, 1756; capture of Ft. Wm. Henry, 1757; capture of Louisburg, 1758; capture of Ft. Du Quesne, 1758; Capture of Quebec, Sept. 18, 1759; Pontiac war, 1763.

RESULT—

Treaty of Paris, Feb. 10, 1763, in which France cedes all territory east of Mississippi to England—west of Mississippi to Spain; Spain cedes Florida to England.

OFFICERS.

British.

Wolf, Braddock, Washington, Shirley, Johnson, Abercrombie, Winslow.

French.

Montcalm, Dieskau, Jumonville, Villiers, St. Pierre, Pontiac, M. Levi.

COLONIAL UNIONS.

United Colonies of New England.

1643.

ORGANIZED—

May 29, 1643.

PLACES OF MEETING—

Boston, Hartford, New Haven, Plymouth.

LASTED—

Forty years.

OBJECT—

Protection against Dutch, French, Indians.

COLONIES—

Massachusetts, Plymouth, New Haven, Connecticut.

REPRESENTATION—

Two from each colony ; qualification, church membership.

Assembly of New York.

1690.

MET IN—

New York ; lasted seven years.

OBJECT—

Protection against French and Indians.

COLONIES—

New York, Massachusetts, Connecticut.

Colonial Congress.

1765.

MET IN—

New York, October 7-24, 1765.

CAUSE—

Stamp Act.

COLONIES—

New York, New Jersey, Delaware, South Carolina, Maryland, Pennsylvania, Rhode Island, Connecticut, Massachusetts.

PROCEEDINGS—

Petition to King and Parliament.

RESULT—

Repeal of Stamp Act, March 18, 1766.

First Continental Congress.

1774.

MET IN—

Philadelphia, September 5 to October 26.

CAUSES—

Mutiny Act; Revenue Act on Teas, etc.; British troops in Boston; Boston Massacre; Boston Port Bill.

COLONIES—

All except Georgia.

PROCEEDINGS—

Declaration of rights; petition to King and Parliament; agreement not to use British imports; agreed upon another Congress, to meet in May, 1775.

Second Continental Congress.

1775.

MET IN—

Philadelphia, May 10, August 1, Sept. 5, 1775, and Dec. 12, 1776.

CAUSE—

British aggression.

COLONIES—

New York, New Jersey, Delaware, South Carolina, Maryland, Pennsylvania, Rhode Island, Connecticut, Massachusetts, Virginia, North Carolina, New Hampshire, Georgia.

PROCEEDINGS—

Voted to raise an army of 20,000; chose Washington commander-in-chief, July 15, 1775; authorized an issue of \$3,000,000; organized P. O. Department, July 26, 1775; appointed committee to draft Declaration of Independence and Articles of Confederation, June 11, 1776; Declaration of Independence adopted July 4, 1776.

CONTINENTAL PRESIDENTS—

Payton Randolph, Henry Middleton, John Hancock, Henry Laurens, John Jay, Samuel Huntington, Thomas McKean, John Hanson, Elias Boudinot, Thomas Mifflin, Richard Henry Lee, Nathaniel Gorham, Arthur St. Clair, Cyrus Griffin.

AMERICAN REVOLUTION.

CAUSE—

Taxation without representation; obstinacy of King; growth of Colonies; bad Royal Governors; remoteness of Colonies; love of liberty.

BATTLES—

1775—Lexington, April 19; Bunker Hill, June 17; Crown Point, May 12; Quebec, Dec. 31.
1776—Boston, March 17; White Plains, Oct. 28; Trenton, Dec. 26.
1777—Bennington, Aug. 16; Brandywine, Sept. 11; Saratoga, Oct. 17.
1778—Monmouth, June 28; Wyoming, July 3
1779—Flamборо, Sept. 23; Savannah, Oct. 9.
1780—Hanging Rock, Aug. 6; King's Mountain, Oct. 7.
1781—Cowpens, Jan. 17; Hobkirk's Hill, April 25; Yorktown, Oct. 19.

RESULTS—

Independence secured; Treaty of Paris, Sept. 3, 1783.

OFFICERS.

American.

Washington, Gates, Lee,
Greene, Warren, Putnam,
Schuyler, Montgomery,
Sullivan, Arnold.

British.

Howe, Clinton, Burgoyne,
Cornwallis, De Heister,
Grant, Prescott, Knyp-
hausen, Prevost, Arnold.

PRESIDENTS OF THE UNITED STATES.

George Washington, Virginia.

1789-1797—8 Years.

Born February 22, 1732; Died December 14, 1799.

VICE-PRESIDENT—

John Adams.

CABINET—

Secretaries of State, Thomas Jefferson, Edmund Randolph and Timothy Pickering; Secretaries of Treasury, Alexander Hamilton and Oliver Wolcott; Secretaries of War and Navy,* Henry Knox, Timothy Pickering and James McHenry; Attorneys-General, Edmund Randolph, William Bradford and Charles Lee; Postmasters-General†, Samuel Osgood, Timothy Pickering and Joseph Habersham.

IMPORTANT EVENTS—

First national bank; Genet trouble; whisky insurrection; capital selected; treaty with Spain; first census, 3,929,214, Northwest territory organized, 1789; Southwest territory organized, 1790.

STATES ADMITTED—

Vermont, 1791; Kentucky, 1792; Tennessee, 1796.

INVENTIONS—

Cotton gin by Eli Whitney, 1793.

* The War Department, as created by Act of Congress, August 7, 1789, had also the superintendence of Naval Affairs. A separation took place in April, 1798, when a Navy Department was established.

† From the organization of the Government down to 1829 the Postmasters-General were not recognized as members of the Cabinet, but are herein printed as such for the sake of uniformity.

John Adams, Massachusetts.

1797-1801—4 Years.

Born October 30, 1735; Died July 4, 1826.

VICE-PRESIDENT—

Thomas Jefferson.

CABINET—

Secretaries of State, Timothy Pickering and John Marshall; Secretaries of Treasury, Oliver Wolcott and Samuel Dexter; Secretaries of War, James McHenry, Samuel Dexter and Roger Griswold; Secretaries of Navy, George Cabot and Benjamin Stoddert; Attorneys-General, Charles Lee and Theophilus Parsons; Postmaster-General, Joseph Habersham.

IMPORTANT EVENTS—

Alien and sedition laws, 1798; capital moved to Washington, 1800; death of Patrick Henry; quasi French war; navy department established; death of Washington; 12th amendment.

Thomas Jefferson, Virginia.

1801-1809—8 Years.

Born 1743; Died 1826.

VICE-PRESIDENTS—

Aaron Burr; George Clinton.

CABINET—

Secretary of State, James Madison; Secretaries of Treasury, Samuel Dexter and Albert Gallatin; Secretary of War, Henry Dearborn; Secretaries of Navy, Benjamin Stoddert, Robert Smith and Jacob Crowninshield; Attorneys-General, Theophilus Parsons, Levi Lincoln, Robert Smith, John Breckenbridge and Cæsar A. Rodney; Postmasters-General, Joseph Habersham and Gideon Granger.

IMPORTANT EVENTS—

Lewis and Clark's expedition, 1803-1806; Louisiana purchase, (\$15,000,000); Hamilton shot, July 11, 1804; Webster's dictionary; war with Tripoli, 1801-1803; slave trade abolished, Jan. 1, 1808.

STATES ADMITTED—

Ohio, 1803.

INVENTIONS—

Steamboat by Robert Fulton, 1807.

James Madison, Virginia.

1809-1817—8 Years.

Born 1751; Died 1836.

VICE-PRESIDENTS—

George Clinton; Elbridge Gerry.

CABINET—

Secretaries of State, Robert Smith and James Monroe; Secretaries of Treasury, Albert Gallatin, George W. Campbell, Alexander J. Dallas and Wm. H. Crawford; Secretaries of War, Wm. Eustis, John Armstrong, James Monroe and Wm. H. Crawford; Secretaries of Navy, Paul Hamilton, William Jones and Benjamin W. Crowninshield; Attorneys-General, Caesar A. Rodney, Wm. Pinkney and Richard Rush; Postmasters-General, Gideon Granger and Return J. Meigs, Jr.

STATES ADMITTED—

Louisiana, 1812; Indiana, 1816.

IMPORTANT EVENTS—

First savings bank; war of 1812; Hartford convention; treaty of Ghent; Algerine war, 1815; first ocean steamer; burning of capitol Aug. 24, 1814.

War of 1812-1814—2½ Years.

CAUSES—

Impressment of American seamen; Orders in council: Milan decree; Embargo.

BATTLES—

1812—LAND: Brownstown, Aug. 5; Queenstown, Aug. 13.

NAVAL: Off Newfoundland, Aug. 13; Off Massachusetts, Aug. 19 and Sept. 7; Off North Carolina, Oct. 18; West Canary Islands, Oct. 25; Off San Salvador, Dec. 29.

1813—LAND: Massacre of Frenchtown, Jan. 22; York, April 27; Fort Meigs, May 5; Sackett's Harbor, May 29; Thames, Oct. 5.

NAVAL: Off Demarra, Feb. 24; Massachusetts Bay, June 1; Coast of Maine, Sept. 5; Lake Erie, Sept. 10.

BATTLES—CONTINUED.

1814—LAND: Chippewa, July 5; Landy's Lane, July 25; Fort Erie, Aug. 15; Plattsburg, Sept. 11; Fort McHenry, Sept. 13; Fort Erie, (Sortie) Sept. 17.
 NAVAL: Off Florida, April 29; near Africa, Sept. 1; Lake Champlain, Sept. 11; Lake Boigne, Dec. 14.
 1815—LAND: New Orleans, Jan. 8.

RESULTS—

Permanent treaty of Ghent, Feb. 18, 1815; recognition of American naval power.

OFFICERS.

American.

Hull, Miller, Winchester, Dearborn, Hampton, Harrison, Brown, Winder, Croghan, Jackson, Decatur, Lawrence, Rodgers, Jones, Perry.

British.

Brock, Tecumseh, Proctor, Prevost, Ross, Drummond, Pakenham, Dacres, Carden, Broke, Hayes, Lockyer, Lambert, Barclay.

James Monroe, Virginia,

1817 to 1825—8 Years.

Born, 1758: Died, 1831.

VICE-PRESIDENT—

D. D. Tompkins.

CABINET—

Secretary of State, John Q. Adams; Secretary of Treasury, William H. Crawford; Secretaries of War, Isaac Shelby and John C. Calhoun; Secretaries of Navy, B. W. Crowninshield, Smith Thompson, John Rogers and Samuel L. Southard; Attorneys-General, Richard Rush and William Wirt; Postmasters-General, Return J. Meigs and John McLean.

STATES ADMITTED—

Mississippi, 1817; Illinois, 1818; Alabama, 1819; Maine, 1820; Missouri, 1821.

IMPORTANT EVENTS—

Florida purchase, (\$5,000,000); Missouri compromise, Monroe doctrine; visit of La Fayette; election of J. Q. Adams by House of Representatives.

John Quincy Adams, Massachusetts.**1825-1829—4 Years.****Born 1767; Died 1848.****VICE-PRESIDENT—**

John C. Calhoun.

CABINET—

Secretary of State, Henry Clay; Secretary of Treasury, Richard Rush; Secretaries of War, James Barbour and Peter B. Porter; Secretary of Navy, Samuel L. Southard; Attorney-General, William Wirt; Postmaster-General, John McLean.

STATES ADMITTED—

None.

IMPORTANT EVENTS—

Erie Canal; American Tract Society; Death of John Adams and Thomas Jefferson, on the fiftieth anniversary of Independence; Protective tariff.

INVENTIONS—

Railroad by George Stephenson.

Andrew Jackson, Tennessee.**1829-1837—8 Years.****Born 1767; Died 1845.****VICE-PRESIDENTS—**

John C. Calhoun; Martin Van Buren.

CABINET—

Secretaries of State, Martin Van Buren, Edward Livingston, Louis McLane and John Forsyth; Secretaries of Treasury, Samuel D. Ingham, Louis McLane, William J. Duane, Roger B. Taney and Levi Woodbury; Secretaries of War, John H. Eaton and Lewis Cass; Secretaries of Navy, John Branch, Levi Woodbury and Mahlon Dickerson; Attorneys-General, John M. Berrien, Roger B. Taney and Benjamin F. Butler; Postmasters-General, William T. Barry and Amos Kendall.

STATES ADMITTED—

Arkansas, 1836; Michigan, 1837.

IMPORTANT EVENTS—

Black Hawk war ; First asylum for blind ; Abolition of U. S. Bank ; Fifth census (12,856,165 ;) Nullification, 1832 ; Clay's tariff compromise.

Martin Van Buren, New York.

1837-1841—4 Years.

Born 1782: Died 1862.

VICE-PRESIDENT—

Richard M Johnson.

CABINET—

Secretary of State, John Forsyth ; Secretary of Treasury, Levi Woodbury ; Secretary of War, Joel R. Poinsett ; Secretaries of Navy, Mahlon Dickerson and James K. Paulding ; Attorneys-General, Benjamin F. Butler, Felix Grundy and Henry D. Gilpin ; Postmasters-General, Amos Kendall and John M Niles.

IMPORTANT EVENTS—

Financial panic ; Osceola captured ; Lovejoy murdered by mob ; First secession ; Sub-Treasury bill.

INVENTIONS—

Vulcanized rubber by Charles Goodyear, 1839.

William H. Harrison, Ohio.

1841—1 Month.

Born 1773: Died April 4, 1841.

VICE-PRESIDENT—

John Tyler.

CABINET—

Secretary of State, Daniel Webster ; Secretary of Treasury, Thomas Ewing ; Secretary of War, John Bell ; Secretary of Navy, George E. Badger ; Attorney-General, John J. Crittenden ; Postmaster-General, Francis Granger.

John Tyler, Virginia.**1841-1845—3 Years. 11 Months****Born 1790: Died 1862.****CABINET—**

Secretaries of State, Daniel Webster, Hugh S. Legare, Abel P. Upshur, John Nelson and John C. Calhoun; Secretaries of Treasury, Thomas Ewing, Walter Forward, John C. Spencer and George M. Bibb; Secretaries of War, John Bell, John C. Spencer, James M. Porter and William Wilkins; Secretaries of Navy, George E. Badger, Abel P. Upshur, David Henshaw, Thomas W. Gilmer and John Y. Mason; Attorneys-General, John J. Crittenden, Hugh S. Legare and John Nelson; Postmasters-General, Francis Granger and Chas. A. Wickliffe.

IMPORTANT EVENTS—

Anti-Mormon excitement; Treaty of Washington; Free Soil party; Bankrupt law.

STATES ADMITTED—

Texas, 1845; Florida, 1845.

INVENTIONS—

Magnetic telegraph by Samuel F. B. Morse, 1844.

James K. Polk, Tennessee.**1845-1849—4 Years.****Born 1795: Died 1849.****VICE-PRESIDENT—**

George M. Dallas.

CABINET—

Secretary of State, James Buchanan; Secretary of Treasury, Robert J. Walker; Secretary of War, Wm. L. Marcy; Secretaries of Navy, George Bancroft and John Y. Mason; Attorneys-General, John Y. Mason, Nathan Clifford and Isaac Toucey; Postmaster-General, Cave Johnson.

IMPORTANT EVENTS—

Mexican war; Naval Academy established; Smithsonian Institute; Independent treasury; Gold discovered in California; Department of Interior established; Slavery prohibited in territories.

STATES ADMITTED—

Iowa, 1846; Wisconsin, 1848.

INVENTIONS—

Sewing machine by Elias Howe, jr.

Mexican War—1845-1848.

CAUSE—

Annexation of Texas, March 1, 1845.

EVENTS—

Taylor's campaign, April, 1846, to February, 1847;
 Fremont's conquest of California, March, 1846 to
 January, 1847; Kearney's conquest of New
 Mexico, June to August, 1846; Doniphan's ex-
 pedition, New Mexico, November, 1846, to June,
 1847; Scott's campaign in Mexico, March, 1847,
 to September, 1848.

RESULTS—

Annexation of New Mexico, Utah, and California;
 Treaty of Gaudalupe Hildago, Feb. 2, 1848.

OFFICERS.

American.

Taylor, Scott, Kearney,
 Worth, Lane, Thornton,
 Walker.

Mexican.

Santa Anna, Arista, Am-
 pudia, Morales, Valencia,
 Alvarez, Bravo.

Zachary Taylor, Louisiana.

1849—1 Year. 4 Months.

Born 1784: Died 1850.

VICE-PRESIDENT—

Millard Fillmore.

CABINET—

Secretary of State, John M. Clayton; Secretary of
 Treasury, William M. Meredith; Secretary of
 War, Geo. W. Crawford; Secretary of Navy,
 William B. Preston; Secretary of Interior,
 Thomas Ewing; Postmaster-General, Jacob Col-
 lamer; Attorney-General, Reverdy Johnson.

IMPORTANT EVENTS—

Squatter sovereignty; Death of Calhoun; Clay's Omnibus bill; Nashville secession convention.

Millard Fillmore, New York.

1850-1853—2 Years, 8 Months.

Born 1800; Died 1874.

CABINET—

Secretaries of State, Daniel Webster and Edward Everett; Secretary of Treasury, Thomas Corwin; Secretaries of War, Winfield Scott, *ad interim*, and Charles M. Conrad; Secretaries of Navy, William A. Graham and John P. Kennedy; Secretary of Interior, Alexander H. H. Stuart; Postmasters-General, Nathan K. Hall and Samuel D. Hubbard; Attorney-General, John J. Crittenden.

STATES ADMITTED—

California, 1850.

IMPORTANT EVENTS—

Fugitive slave law; Kane's Arctic expedition; Death of Clay; Death of Webster.

Franklin Pierce, New Hampshire.

1853-1857—4 Years.

Born 1804; Died 1869.

VICE-PRESIDENT—

William R. King. Died April 18, 1853.

CABINET—

Secretary of State, William L. Marcy; Secretary of Treasury, James Guthrie; Secretary of War, Jefferson Davis; Secretary of Navy, J. C. Dobbin; Secretary of Interior, Robert McClelland; Postmaster-General, James Campbell; Attorney-General, Caleb Cushing.

IMPORTANT EVENTS—

Know-Nothing party; Gadsden purchase (\$10,000,000); Second Kane expedition; Kansas-Nebraska bill; Disruption of American party; Sumner assaulted by Brooks; Republican party organized; Martin Koszta affair; Treaty with Japan.

James Buchanan, Pennsylvania.

1857-1861—4 Years.

Born 1791; Died 1868.

VICE-PRESIDENT—

J. C. Breckenridge.

CABINET—

Secretaries of State, Lewis Cass and Jeremiah S. Black; Secretaries of Treasury, Howell Cobb, Philip F. Thomas and John A. Dix; Secretaries of War, John B. Floyd and Joseph Holt; Secretary of Navy, Isaac Toucey; Secretary of Interior, Jacob Thompson; Attorneys-General, Jeremiah S. Black and Edwin M. Stanton; Postmasters-General, Aaron V. Brown, Joseph Holt and Horatio King.

IMPORTANT EVENTS—

Dred Scott decision; Treaty of Denmark; War with Brigham Young; Atlantic Cable laid, 1858; Execution of John Brown, Dec. 2, 1859; Secession begun; Seceded states—South Carolina, Dec. 20, 1860; Mississippi, Jan. 10, 1861; Florida, Jan. 10, 1861; Alabama, Jan. 11, 1861; Georgia, Jan. 18, 1861; Louisiana, Jan. 26, 1861; Texas, Feb. 1, 1861; Crittenden compromise; Southern Confederacy.

STATES ADMITTED—

Minnesota, 1858; Oregon, 1859; Kansas, 1861.

Abraham Lincoln, Illinois.

1861-1865—4 Years, 1 Month.

Born, 1809; Died, 1865.

VICE-PRESIDENTS—

Hannibal Hamlin; Andrew Johnson.

CABINET—

Secretary of State, William H. Seward; Secretaries of Treasury, Salmon P. Chase, William P. Fessenden and Hugh McCulloch; Secretaries of War, Simon Cameron and Edwin M. Stanton; Secretary of Navy, Gideon Wells; Secretaries of Interior, Caleb B. Smith and John P. Usher; Postmasters-General, Montgomery Blair and William Dennison; Attorneys-General, Edward Bates, Titian J. Coffey and James Speed.

STATES ADMITTED—

West Virginia, 1863 ; Nevada, 1864.

IMPORTANT EVENTS—

Civil war, 1861–1865 ; Secession completed—Virginia, April 17, 1861 ; Arkansas, May 6, 1861 ; North Carolina, May 20, 1861 ; Tennessee, June 8, 1861 ; Confederacy recognized by England, May 13, 1861 ; France, June 10, 1861 ; Spain, June 17, 1861 ; Portugal, July 29, 1861 ; Legal-Tender Act ; Lee surrendered, April 9, 1865 ; Lincoln assassinated, April 14, 1865.

Civil War.

CAUSE—

Slavery.

EVENTS—

1861 : Surrender of Ft. Sumpter, April 13 ; Baltimore mob, April 19 ; Ellsworth shot, May 24 ; Rich Mountain, July 11 ; Bull Run, July 21 ; Trent affair, November 8.

1862 : Ft. Henry, Tennessee, captured, February 6 ; Ft. Donelson, Tennessee, captured, February 16 ; Nashville, Tenn., February 23 ; Battle of Shiloh, April 6–7 ; Yorktown, Va., taken, May 4 ; Memphis captured, June 6 ; Second Bull Run, August 29 ; Antietam, September 17.

1863 : Emancipation proclamation, January 1 ; Gettysburg, July 1–3 ; Surrender of Vicksburg, July 4 ; Chickamauga, September 19–20 ; Amnesty proclamation, December 8.

1864 : Atlanta campaign, May 5 to September 2 ; Nashville campaign, October 1 to December 20 ; Sherman's march to the sea, November 17 to December 17.

1865 : Surrender of Lee to Grant, April 9 ; Lincoln assassinated by Booth, April 14 ; Jeff Davis captured at Irwinsville, Ga., May 10 ; Army disbanded, August 1.

RESULTS—

Slavery abolished ; Union restored.

OFFICERS.

Union.

Grant, Sherman, Sheridan,
McClellan, Banks, Buell,
Burnside, Rosecrans, Mc-
Dowell, Hooker, Meade,
Canby.

Confederate.

Beauregard, Johnston, Lee,
Jackson, Bragg, Pember-
ton, Early, Hood, Forrest,
Ewell, Taylor, Buchanan.

Strength of U. S. Army During Rebellion.

DATE OF CALL.	NUMBER CALLED.	NUMBER OBTAINED.	LENGTH OF SERVICE.
April 15, 1861.....	75,000	93,326	Three months.
May 3, 1861.....	82,748 }	714,231	Three years.
June 22 and 25, 1861.....	500,000 }		
May and June, 1862.....		15,007	Three months.
July 2, 1862.....	300,000	431,958	Three years.
August 4, 1862.....	300,000	87,588	Nine months.
June 15, 1863.....	100,000	16,361	Six months.
October 17, 1863.....	300,000 }	374,807	Two years.
February 1, 1864.....	200,000 }		
March 14, 1864.....	200,000	284,021	Three years.
April 23, 1864.....	85,000	83,652	One hundred days.
July 18, 1864.....	500,000	384,882	One, two or three years.
December 19, 1864.....	300,000	204,568	One, two or three years.
Total.....	2,942,748	2,690,401	

Andrew Johnson, Tennessee.

1865-1869—3 Years. 11 Months.

Born 1808; Died 1875.

CABINET—

Secretary of State, William H. Seward; Secretary of Treasury, Hugh McCulloch; Secretaries of War, Edwin M. Stanton* and John M. Schofield; Secretary of Navy, Gideon Welles; Secretaries of Interior, John P. Usher, James Harlan and O. H. Browning; Postmasters-General, Wm. Dennison and Alexander W. Randall; Attorneys-General, James Speed, H. F. Stanbury and William M. Evarts.

IMPORTANT EVENTS—

International ocean telegraph; Amnesty proclamation; Thirteenth amendment (prohibiting Slavery;) Civil Rights bill; Impeachment; Department of Education; Bankruptcy Act; Fourteenth amendment; Alaska purchased (\$7,200,000).

STATES ADMITTED—

Nebraska, 1867.

* Suspended August 12, 1867, and Gen. U. S. Grant appointed *ad interim*, but by order of the Senate, Mr. Stanton was reinstated in the War Office, January 14, 1868. February 21, 1868, Mr. Stanton was removed from office, and Gen. Lorenzo Thomas, the Adjutant-General, was appointed Secretary of War, *ad interim*; but the Senate did not concur, and Mr. Stanton continued in office. May 26, 1868, the Senate, as a Court of Impeachment, having failed, Mr. Stanton voluntarily retired from the War Office.

Ulysses S. Grant, Illinois.

1869-1877—8 Years.

Born 1822; Died 1885.

VICE-PRESIDENTS—

Schuyler Colfax; Henry Wilson.

CABINET—

Secretary of State, Hamilton Fish; Secretaries of Treasury, G. S. Boutwell, W. A. Richardson, Benj. H. Bristow and Lot M. Morrill; Secretaries of War, J. A. Rawlins, W. W. Belknap, Alphonso Taft and James D. Cameron; Secretaries of Navy, Adolph E. Borie and G. W. Robeson; Secretaries of Interior, J. D. Cox, C. Delano and Zachariah Chandler; Postmasters-General, J. A. J. Creswell, Marshall Jewell and James N. Tyner; Attorneys-General, E. R. Hoar, A. T. Ackerman, G. H. Williams, Edwards Pierpont and A. Taft.

IMPORTANT EVENTS—

Pacific railroad; Reconstruction completed; Fifteenth amendment; Ku-Klux Klan; Chicago fire; Alabama claims (\$15,500,000); Centennial Exposition.

STATES ADMITTED—

Colorado, 1876.

Rutherford B. Hayes, Ohio.

1877-1881—4 Years.

Born 1822.

VICE-PRESIDENT—

William A. Wheeler.

CABINET—

Secretary of State, William M. Evart; Secretary of Treasury, John Sherman; Secretaries of War, George W. McCrary and Alexander Ramsey; Secretaries of Navy, Richard W. Thompson and Nathan Goff, jr.; Secretary of Interior, Carl Schurz; Postmasters-General, David M. Key and Horace Maynard; Attorney-General, Charles Devens.

IMPORTANT EVENTS—

Railroad strike ; Remonetization of silver ; Resumption Act ; Yellow Fever epidemic ; Resumption of specie payment.

James A. Garfield, Ohio.

1881—6 Months. 15 Days.

Born 1831 ; Died 1881.

VICE-PRESIDENT—

Chester A. Arthur.

CABINET—

Secretary of State, James G. Blaine ; Secretary of Treasury, William Windom ; Secretary of War, Robert T. Lincoln ; Secretary of Navy, William H. Hunt ; Secretary of Interior, Samuel J. Kirkwood ; Postmaster-General, Thomas L. James ; Attorney-General, Wayne McVeagh.

IMPORTANT EVENTS—

Civil Service Reform ; President assassinated by C. J. Guiteau, July 2 ; Death of President Garfield, September 19.

Chester A. Arthur, New York.

1881-1885—3 Years. 5 Months and 15 days.

Born 1830. Died 1886.

CABINET—

Secretary of State, Frederick T. Frelinghuysen ; Secretary of Treasury, Charles J. Folger ; Secretary of War, Robert T. Lincoln ; Secretary of Navy, William E. Chandler ; Secretary of Interior, Henry M. Teller ; Postmasters-General, Timothy O. Howe and Walter Q. Gresham ; Attorney-General, Benjamin H. Brewster.

IMPORTANT EVENTS—

Trial of C. J. Guiteau, Nov. 17, 1881, to Jan. 5, 1882 ; Execution of C. J. Guiteau, June 30, 1882 ; River and Harbor bill.

Grover Cleveland, New York.

1888.

Born 1837.

VICE-PRESIDENT—

Thomas A. Hendricks. Died Nov. 25, 1885.

CABINET—

Secretary of State, Thomas F. Bayard; Secretaries of the Treasury, Daniel Manning, Charles S. Fairchild; Secretary of War, William C. Endicott; Secretary of the Navy, William C. Whitney; Secretary of the Interior, Lucius Q. C. Lamar, William F. Vilas; Postmasters-General, William F. Vilas, Don M. Dickinson; Attorney-General, Augustus H. Garland.

IMPORTANT EVENTS—

Railroad Strikes; Hanging of the Anarchists; Deaths of General U. S. Grant, Chester A. Arthur, Thomas A. Hendricks, John A. Logan, David Davis, Daniel Manning, Morrison R. Waite.

Acquisition of Territory of United States.

NAME.	AREA.	Date.	HOW OBTAINED.	FROM WHOM.	COST.
Thirteen States.....	820,680	1776	Revolution.....	England ..	.....
Louisiana.....	889,578	1803	By purchase	France.....	15,000,000
Florida.....	66,900	1819	By purchase	Spain.....	5,000,000
Northern Boundary....	308,052	1846	By treaty	England.....	.....
Texas.....	318,000	1846	By annexation ..	Mexico.....	7,500,000
N. Mexico & California	522,955	1847	By conquest.....	".....	18,000,000
Arizona.....	45,535	1853	By purchase	".....	10,000,000
Alaska.....	577,390	1867	By purchase	Russia.....	7,200,000
Total.....	3,599,091	.....	.....	.....	\$62,700,000

American Wars.

Dutch war, 1673; King Philip's war, 1675; Bacon's rebellion, 1676; King William's war, 1689; Queen Anne's war, 1702; King George's war, 1744; French and Indian war, 1754; Pontiac's war, 1763; American revolution, 1775; Shay's rebellion, 1787; Whisky insurrection, 1794; Indian war, 1794; Barbary war, 1803; Tecumseh war, 1804; War of 1812; Algerine war, 1815; First Seminole war, 1817; Second Seminole war, 1835; Toledo war, 1835; Patriot war, 1837; Dorr's rebellion, 1842; Mexican war, 1846; The Great Rebellion, 1861.

Settlement of the States.

STATES.	SETTLED.			Admitted.	PRESIDENT.
	When.	WHERE.	BY WHOM.		
Virginia.....	1607	Jamestown.....	English.....	Thirteen original states.	
New York.....	1614	New York.....	Dutch.....		
Massachusetts.....	1620	Plymouth.....	English.....		
New Hampshire.....	1623	Little Harbor.....	".....		
Connecticut.....	1633	Windsor.....	".....		
Maryland.....	1634	St. Mary's.....	".....		
Rhode Island.....	1636	Providence.....	".....		
Delaware.....	1638	Wilmington.....	Swedes.....		
North Carolina.....	1650	Chowan River.....	English.....		
New Jersey.....	1664	Elizabeth.....	Dutch.....		
South Carolina.....	1670	Ashley River.....	English.....		
Pennsylvania.....	1682	Philadelphia.....	".....		
Georgia.....	1733	Savannah.....	".....		
Vermont.....	1724	Fort Dummer.....	".....	1791	Washington.
Kentucky.....	1775	Boonesboro.....	".....	1792	
Tennessee.....	1757	Fort London.....	".....	1796	
Ohio.....	1788	Marietta.....	".....	1803	Jefferson.
Louisiana.....	1699	Iberville.....	French.....	1812	Madison.
Indiana.....	1730	Vincennes.....	".....	1816	
Mississippi.....	1716	Natchez.....	".....	1817	
Illinois.....	1682	Kaskaskia.....	".....	1818	
Alabama.....	1711	Mobile.....	".....	1819	Monroe.
Maine.....	1625	Bristol.....	".....	1820	
Missouri.....	1764	St. Louis.....	".....	1821	
Arkansas.....	1685	Arkans's Post.....	".....	1836	Jackson
Michigan.....	1670	Detroit.....	".....	1837	Tyler.
Florida.....	1565	St. Augustine.....	Spaniards.....	1845	
Texas.....	1692	San Antonio.....	".....	1845	
Iowa.....	1833	Burlington.....	English.....	1846	Polk.
Wisconsin.....	1669	Green Bay.....	French.....	1848	
California.....	1769	San Diego.....	Spaniards.....	1850	Fillmore.
Minnesota.....	1846	St. Paul.....	Americans.....	1858	
Oregon.....	1811	Astoria.....	".....	1859	Buchanan.
Kansas.....			".....	1861	
West Virginia.....	1774	Wheeling.....	English.....	1863	Lincoln.
Nevada.....	1850	Genoa.....	Americans.....	1864	
Nebraska.....				1867	Johnson.
Colorado.....				1876	Grant.

English Sovereigns. From 1485-1888.

HOUSE.	NAME.	DATE.
Tudor.....	Henry VII.....	1485-1509
	Henry VIII.....	1509-1547
	Edward VI.....	1547-1553
	Mary.....	1553-1558
Stuart.....	Elizabeth.....	1558-1603
	James I.....	1603-1625
Commonwealth.....	Charles I.....	1625-1649
	Oliver Cromwell.....	1653-1658
Stuart.....	Richard Cromwell.....	1658-1660
	Charles II.....	1660-1685
Orange.....	James II.....	1685-1689
	William and Mary.....	1689-1694
Stuart.....	William III.....	1694-1702
	Anne.....	1702-1714
Brunswick.....	George I.....	1714-1727
	George II.....	1727-1760
	George III.....	1760-1820
	George IV.....	1820-1830
	William IV.....	1830-1837
	Victoria.....	1837

THE PRESIDENTS OF THE UNITED STATES.

NAMES	PLACE AND YEAR OF BIRTH.	PARTY.	Inauguration.	TERM OF OFFICE	PLACE AND DATE OF DEATH.
1 George Washington	Bridge-Creek, Va., 1732	Federalist	1789	8 years	Mr. Vernon, Va., Dec. 14, 1799.
2 John Adams	Brintree, Mass., 1735		1797	4 "	Quincy, Mass., July 4, 1826.
3 Thomas Jefferson	Shadwell, Va., 1743	Republican	1801	8 "	Monticello, Va., July 4, 1826.
4 James Madison	King George, Va., 1751	"	1809	8 "	Montpelier, Va., June 23, 1836.
5 James Monroe	Westmoreland Co., Va., 1758	"	1817	8 "	New York, July 4, 1831.
6 John Quincy Adams	Brintree, Mass., 1767	National Rep.	1825	4 "	Washington, D. C., Feb. 23, 1848.
7 Andrew Jackson	Waxhaw Settlement, N. C., 1767	Democrat	1829	8 "	Nashville, Tenn., June 8, 1845.
8 Martin Van Buren	Kinderhook, N. Y., 1782	"	1837	4 "	Kinderhook, N. Y., July 24, 1862.
9 Wm. Henry Harrison	Berkley, Va., 1773	Whig	1841	1 month	Washington, D. C., April 4, 1841.
10 John Tyler	Charles City Co., Va., 1790		1845	3 years, 11 months	Richmond, Va., Jan. 17, 1862.
11 James K. Polk	Mecklenburg Co., N. C., 1795	Democrat	1845	4 years	Nashville, Tenn., June 15, 1849.
12 Zachary Taylor	Orange Co., Va., 1784	"	1849	1 year, 4 months, 5 days	Washington, D. C., July 9, 1850.
13 Millard Fillmore	Summer Hill, N. Y., 1800	Whig	1850	2 years, 7 months, 26 days	Buffalo, N. Y., March 8, 1874.
14 Franklin Pierce	Hillsboro, N. H., 1804	Democrat	1853	4 years	Concord, N. H., Oct. 8, 1869.
15 James Buchanan	Stony Battery, Pa., 1791	"	1857	4 years, 1 month, 10 days	Wheatland, Pa., June 1, 1868.
16 Abraham Lincoln	Hardin Co., Ky., 1809	Republican	1861	3 years, 10 months, 20 days	Washington, D. C., April 15, 1865.
17 Andrew Jackson	Raleigh, N. C., 1808	"	1865	8 years	Greenville, Tenn., July 31, 1875.
18 Ulysses S. Grant	Point Pleasant, O., 1822	"	1869	4 "	N. Y., July 23, 1885.
19 Rutherford B. Hayes	Delaware, O., 1822	"	1877	4 "	Living.
20 James A. Garfield	Mentor, O., 1831	"	1881	6 months, 15 days	Long Branch, N. J., Sept. 19, 1881.
21 Chester A. Arthur	Farmfield, Vt., 1830	"	1881	3 years 5 months, 15 days	New York city, Nov. 18, 1886.
22 Grover Cleveland		Democrat	1885		Living.

Chronological Table of U. S. History.

986	Herjulfson discovered eastern coast of N. A.
1001	Leif Erickson discovered Vinland.
1492	Columbus discovered West Indies, Oct. 12.
1493	Columbus makes his second voyage.
1497	Cabots discover the coasts of N. A.
1498	Columbus discovered continent of S. A.; 3rd voyage.
1499	Vespucci discovered Guiana and Venezuela.
1501	Vespucci explored Brazil; 2nd voyage.
1502	Columbus explored the shores of the Gulf of Mexico.
1506	Denys explored the St. Lawrence.
1512	DeLeon discovered Florida.
1513	DeBalboa discovered the Pacific Ocean.
1519-21	Cortez conquers Mexico.
1520	Magellan discovered a passage to Pacific Ocean.
1524	Verrazzani explored coast of U. S.
1534	Cartier visits Canada.
1535	California discovered by Cortez.
1541	DeSoto discovered the Mississippi River.
1562	The Huguenots settled in South Carolina.
1564	The Huguenots settled in Florida.
1565	St. Augustine founded by Melendez.
1584	Raleigh explored the coast of N. C.
1598	Planted a colony on the Isle of Sable.
1603	Champlain visits the New World.
1606	London and Plymouth companies organized.
1607	Jamestown founded.
1609	Hudson River discovered.
1614	N. Y. settled by the Dutch.
1619	Negro Slavery introduced.
1620	Landing of the Pilgrims.
1623	New Hampshire settled.
1626	Maine settled.
1633	Connecticut settled.
1634	Maryland settled.
1636	Roger Williams settled in R. I.
1637	Harvard College founded.
1638	Delaware settled by the Swedes.
1643	Union of New England Colonies.
1656	Quaker persecutions in Mass.
1664	N. Y. surrendered to the English.
1675-6	King Philip war.
1676	Bacon's Rebellion.
1680	Charlestown founded.
1689-97	King William's War.
1692	Witchcraft in Mass.
1702-13	Queen Anne's War.
1704	First Colonial Newspaper.

Chronological Table—Continued.

- 1718 New Orleans founded.
1732 George Washington born; Feb. 22.
1733 Georgia settled.
1744-48 King George's War.
1754-63 French and Indian War.
1755 Braddock's defeat, July 9.
1758 Capture of Louisburg, July 27.
1759 Battle of Quebec, Sept. 13.
1763 Treaty of Paris.
1765 Parliament passed the Stamp Act, Mar. 8.
Colonial Congress met in N. Y., Oct. 7.
1766 Stamp Act repealed, Mar. 18.
1767 Parliament taxed tea, glass, lead, etc., June 29.
1768 Mass circular letter.
British troops arrive in Boston, Sept. 27.
1769 California settled.
1770 Boston massacre, Mar. 5.
Parliament abolished all tax except tea.
1773 Boston Tea Party, Dec. 16.
1774 First Continental Congress met in Phila., Sept. 5.
1775 Second Continental Congress met in Phila., May 10.
Battle of Lexington, April 19.
1776 Declaration of Independence was adopted, July 4.
1777 Battle of Brandywine, Sept. 11.
1778 Treaty with France. Battle of Monmouth, June 28.
1779 British driven from the Northwest.
1780 Treason of Arnold.
1781 British defeated at Cowpens.
Cornwallis surrender at Yorktown.
1783 Treaty of Paris.
1787 Adoption of the Constitution, by Convention.
1788 Settlement of Ohio.
1789 Washington inaugurated, April 30.
1791 Vermont was admitted into the Union.
1792 Kentucky was admitted into the Union.
1793 Invention of the Cotton Gin by Eli Whitney.
1794 Wayne defeats the Miami Indians.
1795 Jay's Treaty.
1796 Tenn. admitted into the Union.
1799 Death of Washington at Mt. Vernon, Dec. 14.
1800 Capitol removed to Washington.
Treaty with France.
1801 Jefferson inaugurated.
1803 Louisiana purchased.
1804 Duel between Hamilton and Burr, July 11.
1805 Treaty of Tripoli. Lewis and Clark expedition.
1807 First Steamboat. Embargo Act.

Chronological Table—Continued.

1809	Madison inaugurated, Mar. 4.
1811	Battle of Tippecanoe, Nov. 7.
1812	War declared against Great Britain, June 19. Michigan surrendered to British, Aug. 16.
1813	Perry's victory, Sept. 10.
1814	Burning of the Capitol.
1814	Treaty of Ghent, Dec. 24.
1815	Battle of New Orleans, Jan. 8. War declared against Algiers, Mar. 2.
1816	Indiana admitted into the Union.
1819	Florida purchased, Feb. 22.
1820	Missouri compromise passed, Mar. 3.
1823	Monroe Doctrine announced, Dec. 2.
1824	LaFayette visited the U. S., August 15.
1825	John Q. Adams inaugurated, Mar. 4.
1826	Death of Adams and Jefferson, July 4. First Railroad in the U. S.
1831	First locomotive engine.
1832	Black Hawk War. Nullification in S. C.
1835	War with Seminole Indians, began Dec. 28.
1837	Michigan admitted into the Union, Jan. 26.
1842	Dorr Rebellion. Boundary treaty with England.
1844	First telegraphic line.
1845	Florida and Texas admitted.
1846	Battle of Palo Alto, May 8. Battle of Resaca de la Palma, May 9. Declaration of war, May 11. Oregon boundary treaty with Great Britain, June 1.
1847	City of Mexico surrendered, Sept. 14.
1848	Gold discovered in California. Treaty of Guadalupe Hidalgo, Feb. 2.
1850	Omnibus Bill.
1853	Gadsden purchase, Dec. 30.
1854	Treaty with Japan, Mar. 31. Kansas-Nebraska bill.
1857	Dred Scott decision.
1859	John Brown's raid, Oct. 16.
1860	South Carolina seceded, Dec. 20.
1861	Confederate constitution adopted, Feb. 8. Lincoln inaugurated, Mar. 4. Fort Sumpter fired upon, April 12. Mason and Slidell taken, Nov. 8.
1862	Capture of Ft. Donaldson, Feb. 16. Engagement of Merrimac and Monitor. Capture of Island No. 10, April 7. New Orleans captured, April 25. Lee's invasion of Maryland, September.

Chronological Table—Concluded.

- 1863 Emancipation Proclamation issued.
 Lee's second invasion of the north, June.
 Battle of Gettysburg, July 1-3.
 Surrender of Vicksburg, July 4.
 Draft Riot in N. Y., July 13-16.
 Battle of Chickamauga, Sept. 19-20.
- 1864 Grant made Lieutenant-General, Mar. 3.
 Alabama and Kearsarge, June 19.
 Atlanta captured, Sept. 2.
 Battle of Nashville, Dec. 16.
- 1865 Petersburg and Richmond surrendered, April 3.
 Lee surrenders to Grant, April 9.
 Lincoln assassinated, April 14.
- 1867 Purchase of Alaska, Mar. 30.
- 1868 President Johnson impeached, Feb. 24.
 Treaty with China.
- 1869 Union Pacific railroad in operation.
- 1871 Washington treaty (Alabama claims,) May 8.
 Chicago fire (18,000 houses destroyed,) Oct. 8-10.
- 1873 Modoc War.
- 1876 Centennial Exhibition, May-November.
- 1877 Electoral commission.
- 1879 Specie resumption.
- 1880 Treaty with China (Emigration,) Nov. 17.
- 1881 President Garfield assassinated, July 2.
 Death of Pres. Garfield at Elberon, N. J., Sept. 19.
- 1882 Guiteau hanged, June 30.
- 1883 Burning of the Newhall House, Jan. 10.
- 1885 Death of Gen. Grant, July 23.
 Death of Thomas A. Hendricks, Nov. 25.
 Completion of the Washington Monument, height
 555 ft.
- 1886 Haymarket Riot in Chicago.
 Death of Gen. W. S. Hancock, Feb. 9.
 Death of Samuel J. Tilden, Aug. 4.
- 1887 Hanging of the Anarchists.
- 1888 Death of Roscoe Conkling.

CIVIL GOVERNMENT.

Kinds of Government.

PATRIARCHAL.

THEOCRATIC.

MONARCHY—

Absolute; Limited; Hereditary; Elective.

ARISTOCRACY.

DEMOCRACY—

Pure democracy; Republic.

National Government.

Constitution Ratified, July 26, 1788.

DEPARTMENTS—

Executive; Legislative; Judicial.

Executive Department.

President.

TERM—

Four years.

ELIGIBILITY—

Native-born citizen; Thirty-five years of age;
Fourteen years a resident of the United States.

HOW ELECTED—

Electors; House of Representatives.

OATH.

IMPEACHMENT.

SALARY—

\$50,000.

POWERS AND DUTIES—

MILITARY : (a) Army and Navy ; (b) Militia.

CIVIL : (a) Cabinet ; (b) Reprieves ; Pardons ; (c) Treaties ; (d) Appointments ; (e) Messages ; (f) Legislative ; (g) Convene or adjourn Congress ; (h) Receive foreign ministers ; (i) Execute the laws ; (j) Commission U. S. officers.

Vice-President.**TERM—**

Four years.

ELIGIBILITY—

Native-born citizen ; Thirty-five years of age ;
Fourteen years a resident of the United States.

HOW ELECTED—

Electors ; Senate.

OATH.**IMPEACHMENT.****SALARY—**

\$8,000.

POWERS AND DUTIES—

President of Senate ; President of United States.

Cabinet.**COMPOSED OF—**

Secretary of State ; Secretary of the Treasury ;
Secretary of War ; Secretary of the Navy ; Secretary of the Interior ; Postmaster-General ; Attorney-General.

SALARY OF EACH—

\$8,000 per annum.

Legislative Department.**Vested in Congress.****COMPOSED OF—**

Senate and House of Representatives.

MEETS—

First Monday in December each year.

Senate.**COMPOSED OF—**

Two members from each State.

ELIGIBILITY—

Thirty years of age ; Citizen of the United States
nine years ; Inhabitant of State.

TERM—

Begins March 4 ; Lasts six years.

ELECTED—

By Legislatures of the several States.

VACANCIES FILLED—

By Governor ; Legislatures.

POWERS AND DUTIES—

LEGISLATIVE: With House.

ELECTIVE: (a) Officers ; (b) Vice-President ; Try
impeachments ; Executive.

SALARY—

\$5,000 per annum ; Mileage, twenty cents per mile
each way, \$125 for stationery.

SENATORS FROM MICHIGAN—

Thomas W. Palmer, 1889 ; Francis B. Stockbridge,
1893.

House of Representatives.**COMPOSED OF—**

Three hundred and Twenty-five members.

ELIGIBILITY—

Twenty-five years of age ; Citizen of the United
States seven years ; Inhabitant of State.

APPORTIONED—

One for every 151,912 persons ; Each State one.

TERM—

Begins March 4 ; Lasts two years.

ELECTED—

By the people ; First Tuesday after the first Mon-
day in November.

VACANCIES FILLED—

By special election.

POWERS AND DUTIES—

LEGISLATIVE : (a) With Senate ; (b) Revenue ; Impeachment.

ELECTIVE : (a) Officers ; (b) President.

SALARY—

Same as in Senate.

Expressed Powers of Congress.

FINANCIAL—

RAISING MONEY : (a) Taxes ; (b) Duties ; (c) Imports ; (d) Excises ; (e) Borrow.

PURPOSES—

(a) Payment of United States debts ; (b) Common defence ; (c) General welfare.

REGULATE COMMERCE—

Foreign nations ; Among States ; Indians.

NATURALIZATION AND BANKRUPTCY—

COMMERCIAL—

Coin money.

REGULATE VALUE : (a) Domestic ; (b) Foreign.

Fix standard of weights and measures.

CRIMINAL—

TO DEFINE AND PUNISH : (a) Piracies ; (b) Felonies on the high seas ; (c) International offenses.

TO PROVIDE FOR PUNISHMENT OF COUNTERFEITING : U. S. securities ; U. S. coin.

ESTABLISH POSTOFFICES AND POST ROADS.

GRANT—

Copyrights ; Patents.

ESTABLISH INFERIOR COURTS.

RELATIVE TO WAR—

Declaration ; Letters of marque and reprisal ; Rules of capture ; Raise and support armies ; Provide and maintain navy ; Make rules for army and navy.

CALL OUT MILITIA : (a) To execute laws ; (b) Suppress insurrections ; (c) Repel invasions.

CONTROL MILITIA : (a) Organize ; (b) Arm ; (c) Discipline ; (d) Govern—when in U. S. service.

EXCLUSIVE LEGISLATION OVER—

District of Columbia ; Forts, magazines, etc.

Judicial Department.

VESTED IN—

One supreme court ; inferior courts.

Judiciary of the United States.

Supreme Court.

NAME.	APPOINTED FROM.
Chief Justice Melvin R. Fuller.....	Illinois, 1888.
Justice Samuel F. Miller.....	Iowa, 1862.
Justice Stephen J. Field.....	California, 1863.
Justice Joseph P. Bradley.....	New Jersey, 1870.
Justice John M. Harlan.....	Kentucky, 1877.
Justice Stanley Matthews.....	Ohio, 1881.
Justice Horace Gray.....	Massachusetts, 1881.
Justice Samuel Blatchford.....	New York, 1882.
Justice Lucius Q. C. Lamar.....	Mississippi, 1888.

Circuit Courts.

CIRCUIT.	STATES.	JUDGES.	APPOINTED FROM.
First.....	Me., Mass., N. H., R. I.	LeBarron B. Colt	R. I., 1884.
Second.....	Vt., Conn., N. Y.	Wm. J. Wallace.....	N. Y., 1882.
Third.....	N. J., Pa., Del.	Wm. McKinnan.....	Pa., 1878.
Fourth.....	Md., W. Va., Va., N. C., S. C.	Hugh L. Bend.....	Md., 1870.
Fifth.....	Ga., Flor., Ala., Miss., La., Tex.	Don A. Pardee.....	La., 1881.
Sixth.....	Mich., O., Ky., Tenn.	Howell E. Jackson.....	Tenn., 1886.
Seventh.....	Ill., Ind., Wis.	Walter Q. Gresham.....	Ill., 1884.
Eighth.....	Ark., Col., Ia., Neb., Kan., Minn., Mo.	David J. Brewer.....	Kan., 1884.
Ninth.....	Cal., Oregon, Nevada.....	Lorenzo Sawyer.....	Cal., 1870.

Court of Claims.

NAME.	APPOINTED FROM.
Chief Justice William A. Richardson.....	Massachusetts, 1885.
Judge Charles C. Mott.....	New York, 1865.
Judge Glenni W. Scofield.....	Pennsylvania, 1881.
Judge Lawrence Weldon.....	Illinois, 1883.
Judge John Davis.....	Dist. of Columbia 1885

JUDGES—

Appointed by President and Senate ; Tenure of office during good behavior.

SALARIES : (a) Chief justice, \$10,500 ; (b) Associate Justices, \$10,000 ; (c) Circuit Judges, \$6,000 ; (d) Judges of Court of Claims, \$4,500 ; (e) District Judges, \$3,500—\$5,000.

JURISDICTION—

Original ; Appellate.

Prohibitions of Congress.**WRIT OF HABEAS CORPUS—**

Rebellion ; Invasion.

COMMERCIAL—

Export duties ; Preference of ports.

FINANCIAL—

Paying money without appropriation.

RECEIVING FROM FOREIGN POWER: (a) Present ;
(b) Emolument ; (c) Office ; (d) Title.

CRIMINAL—

Bill of attainder ; Ex-post facto law.

On States.**COMMERCIAL—**

Import duties ; Export duties ; Tonnage duties ;
Law impairing contracts.

CRIMINAL—

Bill of attainder ; Ex-post facto law.

MONEY—

Coin ; Bills of credit ; Legal tender.

WAR—

Letters of marque and reprisal ; Troops or war vessels ; Engage in war.

NOBILITY—**AMENDMENTS—**

FIRST : Liberty of speech ; of press ; of religion ;
Of right to petition.

SECOND : Right to keep and bear arms.

THIRD : Quartering soldiers.

FOURTH : Search Warrants.

FIFTH AND SIXTH : Rights in criminal cases.

SEVENTH : Jury trial where controversy exceeds
twenty dollars.

EIGHTH : Excessive bail ; Fines ; Punishment.

NINTH : Rights retained by people.

TENTH : Powers reserved to states or people.

ELEVENTH : Judicial jurisdiction.

TWELFTH : Election of President and Vice-President.

THIRTEENTH : Slavery ; Involuntary servitude.

FOURTEENTH : Civil Rights ; Representatives ;
Disabilities ; Debt.

FIFTEENTH : Suffrage.

CENSUS OF THE UNITED STATES—

1st, 1790, 3,929,328 ; 2d, 1800, 5,305,925 ; 3d, 1810, 7,239,814 ; 4th, 1820, 9,638,131 ; 5th, 1830, 12,866,026 ; 6th, 1840, 17,069,453 ; 7th, 1850, 23,191,876 ; 8th, 1860, 31,443,321 ; 9th, 1870, 38,558,371 ; 10th, 1880, 50,152,866.

Time for Holding State and Territorial Elections.

STATES AND TERRITORIES.	Salary of Governor.	TIME OF GENERAL ELECTION.
Alabama.....	3,000	First Monday in August.
Arizona Territory.....	2,600	Tuesday after first Monday in November.
Arkansas.....	3,500	First Tuesday in September.
California.....	6,000	Tuesday after first Monday in November.
Colorado.....	3,000	" " " " " "
Connecticut.....	2,000	" " " " " "
Dakota Territory.....	2,600	" " " " " "
Delaware.....	2,000	" " " " " "
Florida.....	3,500	" " " " " "
Georgia.....	3,000	First Wednesday in October.
Idaho Territory.....	2,600	Tuesday after first Monday in November.
Illinois.....	6,000	" " " " " "
Indiana.....	5,000	" " " " " "
Indian Territory.....	2,600	" " " " " "
Iowa.....	3,000	" " " " " "
Kansas.....	3,000	" " " " " "
Kentucky.....	5,000	First Monday in August.
Louisiana.....	4,000	Tuesday after third Monday in April.
Maine.....	2,000	Second Monday in September.
Maryland.....	4,500	Tuesday after first Monday in November.
Massachusetts.....	5,000	" " " " " "
Michigan.....	1,000	" " " " " "
Minnesota.....	3,800	" " " " " "
Mississippi.....	4,000	" " " " " "
Missouri.....	5,000	" " " " " "
Montana Territory.....	2,600	" " " " " "
Nebraska.....	2,500	" " " " " "
Nevada.....	6,000	" " " " " "
New Hampshire.....	1,000	" " " " " "
New Jersey.....	5,000	" " " " " "
New Mexico Territory.....	2,600	" " " " " "
New York.....	10,000	" " " " " "
North Carolina.....	3,000	" " " " " "
Ohio.....	4,000	" " " " " "
Oregon.....	4,500	First Monday in June.
Pennsylvania.....	10,000	Tuesday after first Monday in November.
Rhode Island.....	1,000	First Wednesday in April.
South Carolina.....	3,500	Tuesday after first Monday in November.
Tennessee.....	4,000	" " " " " "
Texas.....	4,000	" " " " " "
Utah Territory.....	2,600	First Monday in August.
Vermont.....	1,000	First Tuesday in September.
Virginia.....	5,000	Tuesday after first Monday in November.
Washington Territory.....	2,600	" " " " " "
West Virginia.....	2,700	" " " " " "
Wisconsin.....	5,000	" " " " " "
Wyoming Territory.....	2,600	" " " " " "

DIPLOMATIC MINISTERS—

To France, German Empire, Great Britain, Russia, salary \$17,500 ; to Austria, Brazil, China, Italy, Japan, Mexico, Spain, salary \$12,000 ; Chili, Peru, Central American States, salary \$10,000 ; Argentine Republic, Belgium, Columbia, Hawaiian Islands, Norway and Sweden, Netherlands, Turkey, Venezuela, salary, \$7,500 ; Bolivia, Hayti, Switzerland, Denmark, Paraguay and Uruguay, Portugal, Liberia, salary \$5,000.

Pay of the Army and Navy of the United States.

ARMY.		NAVY.	
General.....	\$13,500	Admiral.....	\$13,000
Lieutenant-General.....	11,000	Vice-Admiral.....	9,000
Major-General.....	7,500	Rear-Admiral.....	6,000
Brigadier-General.....	5,500	Commodore.....	5,000
Colonel.....	3,500	Captain.....	4,500
Lieutenant-Colonel.....	3,000	Commander.....	3,500
Major.....	2,500	Lieutenant-Commander.....	2,800
Captain (mounted).....	2,000	Lieutenant.....	2,400
Captain (not mounted).....	1,800	Master.....	1,800
Regimental Adjutant.....	1,800	Ensign.....	1,200
Regimental Quartermaster.....	1,800	Chaplain.....	2,500
First Lieutenant (mounted).....	1,600	Surgeon.....	2,800
First Lieutenant (not mounted).....	1,500	Paymaster.....	2,800
Second Lieutenant (mounted).....	1,500	Assistant-Surgeon.....	1,700
Second Lieutenant (not mounted).....	1,400	Midshipman.....	1,000
Chaplain.....	1,500	Gunners.....	1,200

The Electoral Vote.

STATES.	VOTES.	STATES.	VOTES.	STATES.	VOTES.
Alabama.....	10	Maine.....	6	Oregon.....	3
Arkansas.....	7	Massachusetts.....	14	Pennsylvania.....	30
California.....	8	Maryland.....	8	Rhode Island.....	4
Colorado.....	3	Michigan.....	13	South Carolina.....	9
Connecticut.....	6	Mississippi.....	9	Tennessee.....	12
Delaware.....	3	Missouri.....	16	Texas.....	13
Florida.....	4	Minnesota.....	7	Vermont.....	4
Georgia.....	12	New Hampshire.....	4	Virginia.....	12
Illinois.....	22	Nebraska.....	5	West Virginia.....	6
Indiana.....	15	Nevada.....	3	Wisconsin.....	11
Iowa.....	13	New Jersey.....	9		
Kansas.....	9	New York.....	36	Total.....	401
Kentucky.....	13	North Carolina.....	11		
Louisiana.....	8	Ohio.....	23		

ANNUAL SALARIES—

Emperor of Russia, \$8,250,000 ; Sultan of Turkey, \$6,000,000 ; Emperor of Austria, \$4,000,000 ; Emperor of Germany, \$3,000,000 ; Queen Victoria (G. B.) \$2,200,000 ; President of the United States, \$50,000.

CIVIL GOVERNMENT OF MICHIGAN.

Departments.

EXECUTIVE—

Governor ; Assistants.

LEGISLATIVE—

Senate, 32 ; House of Representatives, 100.

JUDICIAL—

Supreme court ; Inferior courts.

Executive Department.

Governor.

ELIGIBILITY—

Age 30 years ; Citizen of the United States five years ; of State, two years.

SALARY—

\$1,000.

Assistant State Officers.

ELECTIVE—

Secretary of State, salary \$800 ; State Treasurer, salary \$1,000 ; Auditor-General, salary \$2,000 ; Commissioner of Land Office, salary \$800 ; Attorney-General, salary \$800 ; Superintendent of Public Instruction, salary \$1,000.

State Boards.

ELECTIVE—

REGENTS : Eight members ; term, 8 years.

EDUCATION : Three members ; term, 6 years.

EX-OFFICIO—

AUDITORS : Secretary of State, State Treasurer, Commissioner of Land Office.

EQUALIZATION : Lieutenant-Governor, Secretary of State, Auditor-General, State Treasurer, Commissioner of Land Office.

CANVASSERS : Secretary of State, State Treasurer, Commissioner of Land Office.

Other State Officers and Clerks.

TITLE.	Salary.	TITLE.	Salary.
Secretary Board of Agriculture.....	\$1,000	Deputy Sup't Public Instruction...	\$1,800
State Librarian.....	1,000	Private Secretary of Governor.....	800
Swamp Land State Road Com'r.....	1,200	Draughtsman State Land Office...	1,000
Commissioner of Insurance.....	2,000	Bookkeeper State Land Office.....	1,000
Deputy Com'r of Insurance.....	1,200	Bookkeeper State Treas. Office ...	1,000
Railroad Commissioner.....	2,500	Bookkeeper Aud.-General's Office ..	1,000
Deputy State Treasurer.....	1,800	Clerk of Attorney General.....	1,000
Deputy Auditor-General.....	1,800	Clerks of Aud.-Gen., four, each....	1,000
Deputy Secretary of State.....	1,800	Clerks of Secretary of State.....	1,000
Deputy Com'r Land Office.....	1,800	Clerks of Com'r of Land Office....	1,000

Legislative Department.**Senate.****HOW COMPOSED—**

One from each district.

ELIGIBILITY—

Citizen of the United States ; Qualified elector ; Inhabitant of county or district.

NUMBER OF MEMBERS—

Thirty-two.

BY WHOM ELECTED—

The people.

WHEN ELECTED—

Tuesday following first Monday in November of every even year.

SALARY—

Three dollars per day during regular session and for first twenty days of extra session, and nothing thereafter ; also ten cents mileage each way, and \$5 for stationery.

QUORUM—

Majority of Members, but a lesser number may adjourn from day to day, and compel the attendance of absent members.

SENATE POWERS—

Legislative—with House ; Judicial—impeachment ; Elective—Senate officers ; Executive.

House of Representatives.**HOW COMPOSED—**

One from each legislative district.

ELIGIBILITY—

Citizen of the United States; Qualified elector; Inhabitant of district.

NUMBER OF MEMBERS—

One hundred.

BY WHOM ELECTED—

The people.

WHEN ELECTED—

Tuesday following first Monday in November of every even year.

SALARY—

Same as in Senate.

QUORUM—

Same as in Senate.

HOUSE POWERS—

Legislative—with Senate; Inquisitorial—impeachment; Elective—House officers.

Judicial Department.**Supreme Court.****CHIEF JUSTICE—**

Thomas R. Sherwood, term expires Dec. 31, 1889.

ASSOCIATE JUSTICES—

John W. Champlin, term expires Dec. 31, 1891.

Allen B. Morse, term expires Dec. 31, 1893.

James V. Campbell, term expires Dec. 31, 1895.

Charles D. Long, term expires Dec. 31, 1897.

SALARY—

\$5,000.

OFFICERS AND THEIR SALARIES—

Clerk, fees; Reporter, \$1,500 and expenses, and a sum not to exceed \$600 per year for clerk hire; Attorney-General, \$800; Crier, \$2 per day and fees; Sheriff, fees; Attorneys, fees.

TERMS—

Four annually, commencing on first Tuesday after first Monday in January, April, June and October.

County.

EXECUTIVE—

Sheriff, fees ; Clerk, salary and fees ; Treasurer, salary and fees ; Register of deeds, fees ; Prosecuting attorney, salary ; Surveyor, \$4 per day and fees ; Coroners (2), fees ; School examiners (3), \$4 per day ; Superintendents of poor (3), salary fixed by board of supervisors.

JUDICIAL—

Circuit Judges, \$2,500 ; Circuit Court Commissioners, fees ; Probate Judge, salary according to population of county.

LEGISLATIVE—

Board of Supervisors, \$3 per day and mileage six cents each way.

Township.

EXECUTIVE—

Supervisor, \$2 per day and fees ; Clerk, \$1.50 per day and fees ; Treasurer, percentage ; School inspectors (2), \$2 per day ; Highway Commissioner, \$1.50 per day ; Drain Commissioner, \$2 per day ; Overseers of Highway, \$1 per day ; Constables (4), fees ; Fence Viewers, \$1 per day.

JUDICIAL—

Justices of the Peace.

LEGISLATIVE—

Township meeting.

ELECTIONS—

March—Dates variously fixed in the different villages ; April—First Monday each year ; November—Tuesday following first Monday, even years.

ELECTIONS.	OFFICERS.	TERM OF OFFICE.
March	Village officers.....	One year.
	Judges of Supreme Court.....	Ten years.
	Judges of Circuit Court.....	Six years.
April	Township and city officers.....	One year.
	Justices of the peace.....	Four years.
	Drain Commissioners.....	Two years.
	State executive officers.....	Two years.
November	State Legislature.....	Two years.
	County officers.....	Two years.
	Probate Judge.....	Four years.

CONGRESSIONAL DISTRICTS OF MICHIGAN—

FIRST DISTRICT: County of Wayne.

SECOND DISTRICT: Counties of Monroe, Lenawee, Hillsdale and Washtenaw.

THIRD DISTRICT: Counties of Jackson, Calhoun, Branch, Barry and Eaton.

FOURTH DISTRICT: Counties of Berrien, Cass, St. Joseph, Kalamazoo and VanBuren.

FIFTH DISTRICT: Counties of Allegan, Kent, Ottawa and Ionia.

SIXTH DISTRICT: Counties of Livingston, Ingham, Oakland, Genesee and Clinton.

SEVENTH DISTRICT: Counties of Macomb, St. Clair, Sanilac, Lapeer and Huron.

EIGHTH DISTRICT: Counties of Montcalm, Gratiot, Isabella, Midland, Saginaw and Shiawassee.

NINTH DISTRICT: Counties of Antrim, Charlevoix, Kalkaska, Lake, Mason, Manistee, Mecosta, Missaukee, Muskegon, Newaygo, Oceana, Osceola and Wexford.

TENTH DISTRICT: Counties of Alcona, Alpena, Arenac, Bay, Cheboygan, Clair, Crawford, Emmet, Gladwin, Iosco, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon and Tuscola.

ELEVENTH DISTRICT: Counties of Alger, Baraga, Benzie, Chippewa, Delta, Gogebic, Grand Traverse, Houghton, Iron, Isle Royal, Keweenaw, Lelanaw, Mackinac, Manitou, Marquette, Menominee, Ontonagon and Schoolcraft.

Governors of Michigan.

TERRITORIAL—

William Hull, 1805; Lewis Cass, 1814; George B. Porter, 1832; Stevens T. Mason, 1834; John S. Horner, 1835; Stevens T. Mason, 1835.

STATE—

Stevens T. Mason, 1837-40; William Woodbridge, 1840-41; J. Wright Gordon (acting,) 1841-42; John S. Barry, 1842-46; Alpheus Fehb, 1846-47; William S. Greenly (acting,) 1847-48; Epaphroditus Ransom, 1848-50; John S. Barry, 1850-52; Robert McClelland, 1852-53; Andrew Parsons (acting,) 1853-55; Kinsley S. Bingham, 1855-59; Moses Wisner, 1859-61; Austin Blair, 1861-65; Henry H. Crapo, 1865-69; Henry P. Baldwin, 1869-73; John J. Bagley, 1873-77; Charles M. Crosswell, 1877-81; David H. Jerome, 1881-83; Josiah W. Begole, 1883-1885; Russell A. Alger, 1885-87; Cyrus G. Luce, 1887.

GEOGRAPHY.

DEFINITIONS—

Geography—Mathematical, political, physical ; Orology ; Meteorology, Hydrology ; Ethnology ; Planets ; Satellites ; Earth—Proofs of rotundity of the earth ; Distance from sun, sphere or globe, diameter, circumference, earthquake, trend, lava, crater, axis ; Poles—North, south ; Revolutions—Annual, diurnal ; Circles—Great, small ; Degree, equator, parallels ; Latitude—North, south, 90 degrees ; Tropics—Cancer, Capricorn ; Polar Circles—Arctic, Antarctic ; Meridian circles, meridian ; Longitude—East, west, 180 degrees ; Isothermal lines ; Horizon ; Equinoxes ; Solstices ; Ecliptic ; Hemispheres—East, west, north, south ; Zones—North and South Temperate, each 43 degrees ; Torrid, 47 degrees ; North and South Frigid, each $23\frac{1}{2}$ degrees ; Earth's surface—Land and water.

NATURAL DIVISIONS OF LAND—

Continent ; Islands—Continental, oceanic ; Atoll ; Peninsula, isthmus, cape, promontory, mountain, hill ; Volcanoes—Active, extinct ; Range or chain, peak or summit ; Valleys—Longitudinal, transverse ; Base, slopes, crest, pass or passage, mountain-knot, plain, prairies or savannas, llanos or pampas, selvas, steppes, table-land or plateau, desert, oasis, swamp, water shed, delta, river basin, Reefs—Fringing, barrier, encircling.

NATURAL DIVISIONS OF WATER—

Ocean, sea, gulf or bay, fiord, harbor, haven or port, road or roadstead, strait, channel, sound ; Lakes—Salt, fresh ; Pond, archipelago, river, estuary, river system, icebergs, glacier, rapids, canon, falls, lagoon ; Springs—Cold, thermal, artesian wells, firth, canal.

TIDES—

Flood, ebb, spring, neap.

CURRENTS—

Temporary, periodical, constant.

MAP.**CLIMATE, DEPENDS UPON—**

Latitude, elevation, prevailing winds, ocean currents, distance from sea.

QUADRANT.**TOPICS FOR GEOGRAPHICAL STUDY—**

Boundaries, latitude, longitude, surface, mountains, plains, islands, capes, bodies of water, rivers, climate, soil, natural curiosities, productions, exports, imports, square miles, population, race, state of society, capital, chief towns, internal improvements, education, religion, government, manners, customs, language, history, science, literature, art.

North America.

COUNTRIES AND FORM OF GOVERNMENT—

Danish America, colony ; British America, colony ; Dominion of Canada, colony ; United States of America, republic ; Mexico, republic ; Central America, five republics, one colony.

MOUNTAINS—

Rocky, Hecla (volcano.) St. Elias (volcano,) Fairweather (volcano,) Cascade, Coast Range, Sierra Madre, Sierra Nevada, Popocatepetl (volcano,) Mt. Hood, Appalachian, Fremont's Peak, Mt. Washington, Long's Peak, Pike's Peak.

RIVERS—

Yukon, Mackenzie, Snake, Savannah, Slave, Saguenay, Ohio, Ottawa, Athabasca, Churchill, Nelson, Severn, Saskatchewan, Columbia, Colorado, Gila, Missouri, Hudson, James, Mississippi, Arkansas, St. Lawrence, Rio Grande.

GULFS AND BAYS—

Baffin, Hudson, James, St. Lawrence, California, Honduras, Campeachy, Mexico, Chesapeake, Delaware.

STRAITS—

Belle Isle, Northumberland, Juan de Fuca, Vancouver, Davis, Hudson, Florida, Yucatan.

ISLANDS—

Arctic archipelago, Disco, Kodiak, Sitka, Queen Charlotte, Vancouver, West Indies, Bahama, Bermuda, Cape Breton, Newfoundland, Greenland, Iceland.

CAPES—

Farewell, Bathurst, Chudleigh, Barrow, Flattery, Mendocino, St. Lucas, Corrientes, Sable, Hatteras, Sandy Hook, Cod, Race.

CITIES—

Reykjavik, Upernavik, Ottawa, Montreal, Quebec, Sitka, Chicago, New York, Boston, Halifax, Philadelphia, Baltimore, Washington, Cincinnati, St. Louis, Vera Cruz, Mexico, San Francisco, Havana.

South America.

COUNTRIES.	CAPITALS.	FORM OF GOV'T.	EMPEROR.	Crowned.
Brazil.....	Rio Janeiro ..	Empire....	Dom Pedro II.....	1831
			PRESIDENTS.	Inaug- urated.
Argentine Republic.....	Buenos Ayres.	Republic...	Juarez Celman.....	1886
Bolivia.....	La Paz.....	"	G. Pacheco.....	1884
Ecuador.....	Quito.....	"	J. M. P. Caamano.....	1883
Chili.....	Santiago.....	"	J. M. Balmaceda.....	1886
Venezuela.....	Caracas.....	"	A. G. Blanco.....	1886
U. S. of Columbia.	Bogota.....	"	R. Nunez.....	1886
Peru.....	Lima.....	"	Gen. Caceres.....	1886
Uruguay.....	Montevideo...	"	Maximo Tages.....	1886
Paraguay.....	Asuncion	"	Gen. Escobar.....	1886
Patagonia.....				
Guiana.....	(British, French, Dutch.	Colonies...		
	Georgetown...			
	Cayenne			
	Paramaribo...			

MOUNTAINS—

Andes, Parima, Pacaraima, Acarai, Geral, Brazilian Andes, Aconcagua (volcano,) Cotopaxi (volcano,) Pichincha (volcano,) Mt. Chimborazo.

RIVERS—

Amazon, Orinoco, Negro, La Plata, Uruguay, Parana, St. Francisco, Paraguay, Magdalena.

GULFS AND BAYS—

Darien, Panama, St. George, Venezuela, St. Matthias, Choco.

ISLANDS—

Terra del Fuego, Joannes or Marajo, Chiloe, Falkland, Wellington, Lobos, Trinidad.

CAPES—

Gallinas, St. Roque, Blanco, Horn, Frio, Corrientes, St. Antonio, Aguja.

CITIES—

Rio Janerio, Bahia, Lima, Bogota, Sucre, LaPaz, Quito, Buenos Ayres, Santiago.

Europe.

COUNTRIES.	CAPITALS.	FORM OF GOV'T.	RULERS.	Crown- ed.
Russia.....	St. Petersburg..	Empire...	Alexander III.....	1881
Turkey.....	Constantinople..	" ..	Abdul Hamid Khan...	1876
Austria.....	Vienna.....	" ..	Franz Joseph I.....	1848
Germany.....	Berlin.....	" ..	Frederick Wilhelm...	1888
Spain.....	Madrid.....	Kingdom..	Alfonso XIII.....	1886
Portugal.....	Lisbon.....	" ..	Luis I.....	1861
Great Britain.....	London.....	" ..	Victoria.....	1837
Italy.....	Rome.....	" ..	Humbert I.....	1878
Holland.....	The Hague.....	" ..	William III.....	1849
Belgium.....	Brussels.....	" ..	Leopold II.....	1865
Denmark.....	Copenhagen.....	" ..	Christian IX.....	1863
Sweden.....	Stockholm.....	" ..	Oscar II.....	1872
and				
Norway.....	Christiana.....	" ..	George I.....	1863
Greece.....	Athens.....	" ..	Milad Obrenovic I....	1882
Servia.....	Belgrade.....	" ..	Karl I.....	1881
Roumania.....	Bucharest.....	" ..	Nicholas I.....	1860
Montenegro.....	Cettigne.....	" ..		
			PRESIDENTS.	
France.....	Paris.....	Republic..	M. F. Sadie-Carnot...	1887
Switzerland.....	Berne.....	" ..	W. F. Hertenstein....	1888

MOUNTAINS—

Alps, Pyrenees, Apennine, Carpathian, Balkan, Caucasus, Ural, Auvergne, Cevennes, Dovrefield, Kiolen, Sierra Nevada, Cantabrian, Sierra Morena, Sierra Estrella, Mt. Blanc, Pindus.

RIVERS—

Ural, Volga, Don, Ebro, Pruth, Dnieper, Dniester, Drave, Dwina, Duna, Onega, Douro, Vistula, Danube, Oder, Guadiana, Elbe, Rhine, Rhone, Seine, Loire, Po, Tagus, Weser, Save.

SEAS, GULFS AND BAYS—

White, Baltic, North, Irish, Adriatic, Azof, Mediterranean, Marmora, Black, Caspian, Bothnia, Finland, Riga, Biscay, Lyons, Genoa, Taranto, Dantzic.

STRAITS—

Gibraltar, Otranto, Dover, Dardanelles, Bosphorus, Yenikale, Cattogat, Skager-Rack, English Channel, St. George's Channel.

ISLANDS—

Lofoden, Faroe, Shetland, Orkney, British, Balearic, Corsica, Sardinia, Sicily, Malta, Ionian, Candia, Cyprus.

CAPES—

North, Clear, Land's End, St. Matthew, Finisterre, St. Vincent, Ortegal, Matapan.

CITIES—

St. Petersburg, Archangel, Odessa, Astrakan, Moscow, Hammerfest, Berlin, Christiana, Stockholm, The Hague, Brussels, Paris, Vienna, Berne, Rome, Naples, Madrid, Lisbon, Athens, Constantinople, Cettigne, Bucharest.

Asia.

COUNTRIES.	CAPITALS.	FORM OF GOV'T.	RULERS.	Crown- ed.
Siberia.....	St. Petersburg..	Colony.....	.....	.....
China.....	Pekin.....	Empire.....	Kwang Su.....	1875
Japan.....	Tokio or Yeddo..	".....	Mutsu Hito.....	1876
Turkey.....	Constantinople..	".....	Abdul Hamid II..	1876
Burmah.....	Mandalay.....	Kingdom.....	Inendoommen.....	.....
Siam.....	Bankok.....	".....	Chan Ta Chule Long Korn	.....
Anam.....	Hue.....	".....	Tu Duc.....	.....
Arabia.....	Muscat.....	Despotism.....	.....	.....
Persia.....	Teheran.....	Empire.....	Nassr-ed-Din.....	1848
British India.....	Calcutta.....	Colony.....	.....	.....
Eastern Turkestan.....	Kashgar.....	".....	.....	.....
Afghanistan.....	Cabul.....	Despotism.....	Yakob Khan.....	.....
Beloochistan.....	Kelat.....	".....	Mir Nasa Khan.....	.....

MOUNTAINS—

Himalaya, Yablonoi, Altai, Khin Gan, Nanling, Hindoo Koosh, Kara-Korum, Western Ghauts, Eastern Ghauts, Elburz, Taurus, Mt. Sinai, Mt. Ararat, Mt. Everest, Thian-Shan, Fujiyama, (volcano,) Vindhya, Kuenlun, Stanovoy.

RIVERS—

Lena, Yenisei, Obi, Irtish, Angara, Sihon, Amoo, Hoang-Ho, Yang-tse-Kiang, Brahmapootra, Cambodia, Ganges, Indus, Tigris, Euphrates, Amoor.

SEAS, GULFS AND BAYS—

Kara, Arabian, China, Blue, Yellow, Japan, Okhotsk, Behring, Red, Aral, Obi, Persian, Aden, Bengal, Siam, Tonquin, Anadir, Pechelea.

STRAITS—

Behring, Channel of Tartary, Corea, Formosa, Malacca, Ormus, Babel Mandeb, Palk, Hainan.

ISLANDS—

Nova Zembla, New Siberia, Kurile, Saghalien, Yezo, Hondo, Shikoku, Kiushiu, Formosa, Japan, Hainan, Ceylon, Cyprus, Laccadive, Maldive, Bahrain, Nicobar, Andaman, Socotra.

CAPIES—

Northeast, East, Lopatka, Cambodia, Romania, Comorin.

CITIES—

Pekin, Lassa, Seoul, Kashgar, Hue, Bangkok, Mandalay, Calcutta, Colombo, Cabul, Teheran, Riad, Muscat, Tobolsk, Omsk, Tomsk, Tiunan, Barnaul, Irkoutsk, Khiva, Bokhara, Smyrna, Damascus, Jerusalem.

Africa.**COUNTRIES—**

Barbary States—Morocco, Algeria, Tunis, Tripoli; Fezzan, Egypt, Nubia, Soudan, Abyssinia, Zanguebar, Upper Guinea, Sierra Leone, Lower Guinea, Barca, Mozambique, Cape Colony, Natal, Transvaal, Orange Free States, Senegambia, Liberia, Sahara.

MOUNTAINS—

Atlas, Kong, Crystal, Snow, Great Karroo, Kondi,
Mt. Kenia, Mt. Killamandjaro, Cameroon.

RIVERS—

Nile, White Nile, Blue Nile, Atbara, Zambesi, Orange, Congo, Niger.

GULFS AND BAYS—

Sidra, Cabes, Guinea, False, Algoa, Delagoa.

ISLANDS—

St. Helena, Canary, Princes, St. Thomas, Madagascar, Comoro, Zanzibar, Socotra.

CAPIES—

Bon, Spartel, Blanco, Verde, Palmas, Lopez, Negro, Frio, Good Hope, Agullhas, Corrientes, Delgado, Amber, Guardafui, St. Mary.

CITIES—

Cairo, Alexandria, Damietta, Port Said, Suez, Gondar, Antalo, Ankobar, Zanzibar, Tananarivo, Bloemfontein, Cape Town, Pietermaritzburg, Pretoria, Monrovia, Fcz, Free Town, Morocco, Algiers, Constantine, Oran, Tunis, Tripoli, Mourzouk, Bengazi, Timbuctoo, Kano, Sokoto, Kuka.

Oceanica.

DIVISIONS—

Malaysia, Australasia, Polynesia.

MOUNTAINS—

Blue, Darling, Australian Alps, South Alps, Ashburton, Egmont (volcano,) Edgecombe (volcano,) Mt. Ophir, Mt. Kosciusko, Hawaii (volcano.)

RIVERS—

Murray, Darling, Victoria, Lachlan, Ashburton, Cooper.

SEAS, GULFS AND BAYS—

Botany, Coral, Carpentaria, Spencer, Java, Celebes, Cambridge, Arafura.

STRAITS—

Bass, Cook, Sunda, Torres, Molucca, Macassar.

ISLANDS—

Australia, New Guinea, Sumatra, Borneo, Java, Celebes, Molucca, Philippine, Singapore, Sandwich, New Zealand, Friendly, Society, Feejee, Tasmania, Solomon, Banca.

CAPIES—

York, Sandy, Howe, Wilson, Leeuwin, Northwest, Datu, Farewell, West, East, Maria.

CITIES—

Acheen, Bencoolen, Batavia, Manila, Victoria, Wellington, Sydney, Hobart, Adelaide.

Races and Religions.

RACES—

Caucasian, 600,000,000 ; Mongolian, 600,000,000 ; African, 250,000,000 ; Malay, 4,000,000 ; American, 8,000,000. Estimated to speak over 3,000 different languages.

RELIGIONS—

Pagans, 676,000,000 ; Christians, 320,000,000 ; Mohammedans, 140,000,000 ; Jews, 14,000,000. Profess about 1,000 different forms of religion.

Population of Some of the Principal Cities of the World.

London, 3,533,484 ; Paris, 1,988,806 ; Pekin, 1,650,000 ; Canton, 1,500,000 ; New York, 1,206,590 ; Berlin, 1,049,663 ; Vienna, 1,020,770 ; Philadelphia, 846,984 ; Tokio, 811,510 ; St. Petersburg, 667,963.

Ten Principal Cities of the United States.

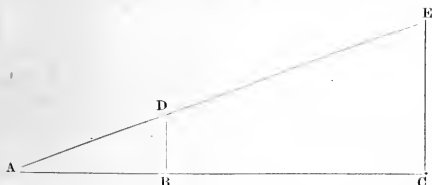
New York, 1,206,590 ; Philadelphia, 846,984 ; Brooklyn, 566,689 ; Chicago, 503,304 ; Boston, 362,535 ; St. Louis, 350,522 ; Baltimore, 332,190 ; Cincinnati, 255,708 ; San Francisco, 233,956 ; New Orleans, 216,140.

Seven Wonders of the World.

The pyramids, temples and hanging gardens of Babylon ; Statue of Jupiter Olympus ; Temple of Diana at Ephesus ; Mausoleum of Halicarnassus ; The Pharos ; The Colossus of Rhodes.

Highest Mountains in the World.

OLD WORLD.	FEET.	NEW WORLD.	FEET.
Mount Everest.....	29,000	Nevada de Sorato.....	25,000
Hindoo Koosh.....	29,000	Aconcagua.....	24,422
Elburz.....	18,572	Chimborazo.....	21,414
Ararat.....	16,960	Popocatepetl.....	17,784
Mount Blanc.....	15,780	Orizaba.....	17,897
Monte Rosa.....	15,223	Mount Whitney.....	15,000
Pic Anethout.....	11,168	Uncompahgre.....	14,287
Kilima Njaro.....	20,065	Gray's Peak.....	14,295
Kosciusko.....	7,176	St. Elias.....	14,970

Rule for Measuring Height of Objects.

Knowing distance from A to C, from A to B, and from B to D to find the distance from C to E.

RULE—

Divide the distance from A to C by the distance from A to B, and multiply the quotient by the distance from B to D.

Length of Degrees of Longitude in Different Latitudes.

DEGREE OF LATITUDE.	STATUTE MILES.	DEGREE OF LATITUDE.	STATUTE MILES.
1	69.15	50	44.43
5	68.85	55	39.64
10	68.06	60	34.56
15	66.76	65	29.21
20	64.94	70	23.64
25	62.64	75	17.89
30	59.85	80	12.00
35	56.62	85	6.02
40	52.94	90	0.00
45	48.88		

Rule to Find the Length of a Degree of Longitude at any Latitude.**RULE—**

With globe ascertain the number of equatorial degrees—at desired latitude—between any two

Rule to Find the Length of a Degree of Longitude at any Latitude—Continued.

meridians, which multiply by 60 and divide product by the number of degrees between the two meridians; the quotient will be the number of geographical miles.

EXAMPLE—

Find the length of a degree of longitude at Grand Rapids, Mich. The distance between two meridians at Grand Rapids is 11 equatorial degrees; $11 \times 60 \div 15 = 44$ geographical miles; $44 \times 1.152\frac{2}{3} = 50.72$ statute miles.

Length of the Principal Rivers of the World.

NEW WORLD.	MILES.	OLD WORLD.	MILES.
Mississippi.....	4,200	Nile.....	4,000
Amazon.....	3,750	Yenisei.....	3,400
Missouri.....	3,100	Yang-tse-Kiang.....	3,320
LaPlata.....	2,300	Obi.....	3,000
Mackenzie.....	2,300	Niger.....	3,000
St. Lawrence.....	2,000	Lena.....	2,700
Saskatchewan.....	1,900	Amoor.....	2,650
Yukon.....	1,600	Brahmapoortra.....	2,300
Orinoco.....	1,550	Volga.....	2,000
San Francisco.....	1,550	Indus.....	1,850
Rio Grande Del Norte.....	1,500	Danube.....	1,800
Columbia.....	1,020	Euphrates.....	1,750
Colorado.....	1,000	Ganges.....	1,600
Alabama.....	650	Zambezi.....	1,600
Susquehanna.....	400	Murray.....	1,500
Connecticut.....	350	Rhine.....	880
Hudson.....	330		

Elevation of Lakes.

NAME.	FEET.
Sirikal (Source of Amoor River).....	15,000
Manasarowar.....	15,000
Rawan Rhud (source of Sutlege River).....	15,000
Titicaca (South America).....	12,846
Aullagus.....	12,257
Yellowstone (Wyoming).....	7,780
Great Salt Lake (Utah).....	4,200
Itasca (Minnesota).....	1,575
Superior.....	600
Michigan.....	585
Huron.....	585
Erie.....	565
Ontario.....	231
Sea of Aral (Salt).....	36

Depression of Lakes.

NAME.	FEET.
Dead Sea, or Lake Asphaltites (Salt).....	1,312
Lake Tiberias.....	755
Caspian Sea (Salt).....	83

Canals.

NEW WORLD.		OLD WORLD.	
NAME AND LOCATION.	LENGTH IN MILES.	NAME AND LOCATION.	LENGTH IN MILES.
Erie, New York.....	363	Imperial, China.....	1,000
Genesee, New York.....	124 $\frac{3}{4}$	Ludwig's, Germany.....	108
Ohio, Ohio.....	332	Caledonia, Great Britain.....	60
Miami and Erie, Ohio.....	291	Du Midi, France.....	150
St. Mary's, Michigan.....	1	North Holland, Holland.....	51
Delaware and Hudson, Penn.	108	Suez, Africa.....	100

Comparative Table of Islands.

In the following table Michigan, with an area of of 56,500 square miles, is taken as a unit.

NAME.	Areas in Square Miles.	Compara- tive Size.
Australia	3,000,000	53.09
Borneo.....	300,000	5.30
New Guinea.....	275,000	4.09
Madagascar	200,000	3.53
Sumatra.....	130,000	2.47
New Zealand.....	106,000	1.87
Great Britain.....	84,000	1.50
Celebes.....	70,000	1.23
Java.....	51,500	.91
Cuba.....	46,000	.81
Newfoundland.....	40,200	.71
Iceland.....	35,000	.61
Ireland.....	32,500	.57
Hayti.....	28,000	.49
Tasmania.....	26,200	.46
Ceylon.....	24,500	.43
New Caledonia.....	6,500	.11
Jamaica.....	6,000	.10
Timor.....	5,000	.08
Bahamas.....	4,800	.08

GRAMMAR.

ORTHOGRAPHY.

ETYMOLOGY.

SYNTAX.

PROSODY.

Orthography.

(See outline of this subject.)

Etymology.

DEFINITIONS—

Parts of speech—Noun, pronoun, adjective, verb, adverb, preposition, conjunction, interjection, participle, declension, comparison, conjugation, parsing, inflection, synopsis.

Nouns.

COMMON—

Class ; Abstract ; Collective ; Verbal.

PROPER.

PROPERTIES—

Gender—Masculine, feminine, common, neuter ;
Person—First, second, third ; Number—Singular, plural ; Case—Nominative, possessive, objective, absolute or independent.

GENDER OF NOUNS DETERMINED—

By termination ; By different words ; by prefixes or suffixes.

PLURAL OF NOUNS FORMED—

By inflection ; by radical change.

Pronouns.

ANTECEDENT.

CONSEQUENT.

PERSONAL—

Simple ; Compound.

POSSESSIVE.

RELATIVE—

Simple, Compound.

INTERROGATIVE.

Adjectives.

DESCRIPTIVE—

Common ; Proper ; Participial.

DEFINITIVE—

Articles ; Pronominals ; Numerals.

COMPARISON—

Degree—Positive ; Comparative ; Superlative.

Verbs.

USE—

Transitive ; Intransitive ; Copulative ; Principal ; Auxiliary ; Unipersonal.

FORM—

Regular ; Irregular ; Redundant ; Defective.

NATURE—

Active ; Passive ; Neuter.

PROPERTIES—

Voice—Active, passive ; Mode, Indicative, subjunctive, potential, imperative, infinitive ; Tense—Present, present perfect, past, past perfect, future, future perfect ; Number and person—Same as subject.

Adverbs.

Time ; Place ; Cause ; Degree ; Manner ; Interrogative ; Conjunctive ; Modal ; Adverbial phrase.

Prepositions.

Simple ; Complex.

Conjunctions.

USE—

Co-ordinate ; Subordinate.

MEANING—

Copulative ; Disjunctive ; Correlative.

Syntax.

Analysis ; Synthesis.

ELEMENTS—

Principal—(a) Subject ; (b) Predicate ; (c) Object ;
Subordinate—Adjective, adverbial.

PHRASES—

Classes—(a) Substantive ; (b) Adjective ; (c) Adverbial ; (d) Independent. Function—(a) Simple ; (b) Compound ; (c) Transitive ; (d) Intransitive ; (e) Principal ; (f) Auxiliary ; (g) Complex ; (h) Mixed. Form—(a) Prepositional ; (b) Infinitive ; (c) Participle ; (d) Nominal.

CLAUSES—

Subject ; Predicate ; Relative ; Appositive ; Interrogative ; Objective ; Adverbial.

SENTENCES—

Function—(a) Declarative ; (b) Interrogative ; (c) Imperative ; (d) Exclamatory. Form (a) Simple ; (b) Complex ; (c) Compound.

FIGURES OF SPEECH—

Etymology—(a) Apheresis ; (b) Prosthesis ; (c) Paragoge ; (d) Syncope ; (e) Apocope ; (f) Tmesis ; (g) Dieresis ; (h) Syneresis. Syntax—(a) Pleonasm ; (b) Ellipsis ; (c) Parenthesis ; (d) Enallage ; (e) Zeugma ; (f) Syllepsis ; (g) Hyperbaton. Rhetoric—(a) Simile ; (b) Metaphor ; (c) Allegory ; (d) Metonymy ; (e) Synecdoche ; (f) Euphonesis ;

FIGURES OF SPEECH—CONTINUED.

(*g*) Antithesis ; (*h*) Irony ; (*i*) Interrogation ; (*j*) Hyperbole ; (*k*) Vision ; (*l*) Apostrophe ; (*m*) Personification ; (*n*) Erotesis ; (*o*) Climax ; (*p*) Epigram ; (*q*) Litotes, (*r*) Catachresis.

Prosody.

Punctuation, Versification, Stanza.

DISCOURSE—

Prose ; Poetry—(*a*) Rhyme ; (*b*) Blank verse ; (*c*) Feet—Iambus, trochee, spondee, pyrrhic, anapest, dactyl, amphibrach, ; (*d*) Accent.

POETIC PAUSES—

Final ; Caesural.

READING.

READING—

The perusal, or the oral expression of written or printed composition.

OBJECT OF—

(1) To gain and (2) to impart knowledge.

ORTHOEPY—

The proper utterance of words.

EXPRESSION—

The conveyance of thought by the modulated voice.

GESTURE—

Action or attitude used to express or enforce sentiment or emotion.

Orthoepy.

ARTICULATION—

The utterance of the elementary sounds separately or combined.

SYLLABICATION—

The process of dividing words into syllables.

ACCENT—

A more forcible stress of voice upon one syllable of a word than upon another.

Articulation.

CORRECT ARTICULATION ACQUIRED—

- (1) By an accurate knowledge of the elementary sounds.
- (2) By knowing the appropriate places for these sounds in words; and (3) By applying this knowledge constantly in reading and conversation.

ELEMENTARY SOUNDS—

Syllables and words should be distinctly uttered.

ORGANS OF SPEECH—

Lips, teeth, tongue and palate.

VOICE—

Produced by the passage of air through the larynx.

ELEMENTARY SOUNDS—

Are divided into *vocals*, *sub-vocals* and *aspirates*.

VOCALS—

Those tones of voice which are unobstructed by the organs of speech.

SUB-VOCALS—

Those tones which are modulated by the organs of speech.

ASPIRATES—

Those elementary sounds which are produced by the breath alone.

PRINCIPAL ERRORS IN ARTICULATION—

- (1) Addition of one or more elementary sounds.
- (2) Omission of one or more elementary sounds.
- (3) The using of one elementary sound for another.

Syllabication.

SYLLABLE—

One or more elementary sounds uttered in unison.

MONOSYLLABLE—

A word of one syllable.

DISSYLLABLE—

A word of two syllables.

TRISYLLABLE—

A word of three syllables.

POLYSYLLABLE—

A word of four or more syllables.

ULTIMATE—

The last syllable of a word.

PENULT—

The last syllable of a word but one.

ANTEPENULT—

The last syllable of a word but two.

PREANTEPENULT—

The last syllable of a word but three.

Words have as many syllables as they contain vowel sounds. A syllable should never be divided at the end of a line. Constant use of the dictionary should be made in the study of syllabication.

Accent.

PRIMARY ACCENT—

The more forcible stress of voice.

SECONDARY ACCENT—

The less forcible stress of voice.

In Webster's dictionary the primary accent is indicated by a heavy mark, and the secondary accent by a lighter mark.

Expression.

MODULATION—

The variation of voice heard in reading and speaking.

EMPHASIS—

A special stress of voice on one or more words of a sentence.

PERSONATION—

The variation of the voice used to represent two or more persons as speaking.

PAUSES—

The cessation of voice in reading or speaking, used to add force to the expression, also to mark grammatical construction.

SLUR—

A smooth gliding movement of the voice heard in reading and speaking.

MONOTONE—

A sameness of tone or absence of inflection.

Modulation.

PITCH—

The elevation of the voice, as heard in reading and speaking.

DIVISION OF PITCH—

(1) Low, (2) common and (3) high.

LOW PITCH—

Any tone of voice lower than the common.

COMMON PITCH—

The tone of voice used in conversation.

HIGH PITCH—

Any tone of voice higher than the common.

RATE—

The time of utterance in reading and speaking.

DIVISION OF RATE—

(1) Slow, (2) medium and (3) rapid.

SLOW RATE—That used in expressions of solemnity, devotion, etc.

MEDIUM RATE—

That used in common conversation, narration or description.

RAPID RATE—

That used in expressions of joy, anger, excitement and haste.

QUALITY—

Refers to the kind of tone.

PURE TONE—That used in common conversation.

ASPIRATED—

The whisper, or the whisper partly vocalized.

OROTUND—

The *pure tone* deepened and enlarged.

GUTTURAL—

That in which the voice seems to be produced in the throat.

NASAL—

That in which the voice seems to pass through the nose.

FALSETTO—

Any tone above the natural compass of the voice.

PECTORAL—

Any tone below the natural compass of the voice.

TREMBLING—

That used in excessive grief or pity, or to represent enfeebled age.

FORCE—

Refers to the volume of sound without change of pitch.

DIVISIONS OF FORCE—

(1) Subdued, (2) Moderate and (3) Strong.

SUBDUED FORCE—

Is less than the common energy of the voice.

MODERATE FORCE—

That usually employed in conversation, narration, etc.

STRONG FORCE—

That greater than the common energy of the voice.

STRESS—

The manner of applying emphasis to one or more words of a sentence.

DIVISION OF STRESS—

(1) Initial, (2) final, (3) sustained, (4) median, (5) compound and (6) tremulous.

INITIAL STRESS—

That in which the emphasis falls upon the beginning of a word or phrase, and gradually diminishes.

FINAL STRESS—

That in which the emphasis is gradually increased.

SUSTAINED STRESS—

That in which the emphasis commences, continues and ends with the same force.

MEDIAN STRESS—

That in which the emphasis is applied with the greatest force in the middle of the sound.

COMPOUND STRESS—

That in which the emphasis is applied with the greatest force at the initial and final parts of the sound.

INTERMITTENT STRESS, OR TREMULOUS—

That in which the emphasis is applied in wave like impulses.

INFLECTION—

The change of pitch used in reading and speaking.

RISING INFLECTION—

That in which the voice glides upwards and suggests incomplete sense.

FALLING INFLECTION—

That in which the voice glides downward and suggests complete sense.

CADENCE—

The fall of the voice at the end of a sentence.

Emphasis.

INDICATED BY—

(1) Italics, (2) small capitals, and (3) large capitals.

ABSOLUTE EMPHASIS—

That which is used upon words not compared with others in the sentence.

ANTITHETIC EMPHASIS—

That which is used upon words contrasted with others in the sentence.

Pauses.

GRAMMATICAL—

Those used to indicate the nature or meaning of the sentence.

RHETORICAL—

Those used to add force to the expression where the construction does not admit of a grammatical pause.

Gesture.

INCLUDES—

(1) Attitude, (2) gesticulation, and (3) facial expression.

ATTITUDE—

The position of the body when at rest in expressing or enforcing sentiment or emotion.

GESTICULATION—

The movement of the body, or change of position in expressing or enforcing sentiment or emotion.

FACIAL EXPRESSION—

The language of the countenance with reference to feeling or emotion.

Attitude.

CLASSIFIED—

As (1) firm, (2) relax, (3) advancing, and (4) receding.

A FIRM ATTITUDE—

When the muscles are firm and rigid.

A RELAX ATTITUDE—

When the muscles are relax and loose.

AN ADVANCING ATTITUDE—

When the body is inclined forward.

A RECEDING ATTITUDE—

When the body is inclined backward.

Gesticulation.

INCLUDES—

Movements of (1) head, (2) upper limbs, and (3) lower limbs.

POSITION OF HEAD—

(1) Erect, (2) inclined backward (3) inclined forward, and (4) inclined to one side.

ERECT POSITION—

Indicates confidence, firmness, courage, etc.

BACKWARD POSITION—

Indicates mirth, pride, etc.

FORWARD POSITION—

Indicates shame, humility grief, etc.

LATERAL POSITION—

Indicates carelessness, indifference, feebleness, etc.

UPPER LIMBS—

Movements of, includes those of (1) the hands, and (2) the arms.

POSITIONS OF HAND—

With reference to the palm are known as (1) prone, (2) supine, (3) vertical, and (4) repelling.

With reference to the fingers as (1) natural, (2) vertical, (3) indexical, (4) clenched, (5) extended, and (6) clasped.

THE PRONE POSITION—

The palm downward denoting secrecy.

THE SUPINE POSITION—

The palm upward, information, advice, etc.

THE VERTICAL POSITION—

The palm perpendicular, obligation, amazement, etc.

THE REPELLING POSITION—

The palm outward, repulsion, dislike, etc.

THE NATURAL POSITION—

The fingers hanging loosely, ordinary conversation or discourse.

THE VERTICAL POSITION—

The fingers pointing upward, appeals to duty, surprise, etc.

THE INDEXICAL POSITION—

The forefinger extended, used in pointing.

THE CLENCHED POSITION—

The hand closed tightly, violence, anger, etc.

THE EXTENDED POSITION—

The fingers extended, free, open, plain, etc.

THE CLASPED POSITION—

The hands united and closed, entreaty, etc.

POSITIONS OF ARM—

Are (1) front, (2) lateral, (3) oblique and (4) backward.

FRONT POSITION—

The arm directly in front, used in emphatic assertion or direct appeal.

LATERAL POSITION—

The arm extended to the right or left, used in language of a general nature and appeals to the intellect.

OBLIQUE POSITION—

The arm between the front and lateral positions.

BACKWARD POSITION—

The arm back of the lateral position.

POSITIONS OF LOWER LIMBS—

Are (1) advanced, (2) retire, and (3) lateral.

ADVANCED POSITION: The movement of either foot forward.

RETIRED POSITION: The movement of either foot backward.

LATERAL POSITION: The movement of either foot to the right or left of first position.

FACIAL EXPRESSION—

Named as (1) natural, (2) smiling, (3) averted, (4) dejected, and (5) staring.

NATURAL EXPRESSION: Indicates satisfaction, reverence, etc.

SMILING EXPRESSION: Indicates cheerfulness, good will, etc.

AVERTED EXPRESSION: Indicates perplexity, disgust, etc.

DEJECTED EXPRESSION: Indicates shame, sorrow, humility, etc.

STARING EXPRESSION: Indicates boasting, defiance, etc.

[For complete definitions to the above outlines with methods of teaching and selections for practice, see the author's "MANUAL OF READING." Price 35 cents; sample copy 25 cents.]

ORTHOGRAPHY.

ORTHOGRAPHY—

Treats of the style, size, sound and combination of letters.

STYLE—

Includes the following: Roman, Italics, Old English, Antique, German Text, Gothic, Full Face, Script, Old Style.

SIZE—

Letters are named with reference to their size as follows: Pica, Small Pica, Long Primer, Bourgeois, Brevier, Minion, Nonpareil, Agate, Pearl. Each having two forms—capital and small.

SMALL LETTERS—

Are used for all common purposes.

CAPITAL LETTERS—

Are used for distinction and prominence. The following are some of the rules for their use:

PROPER NAMES: All proper nouns and their derivatives take the initial capital.

NAMES OF DEITY: Words denoting Deity should take the initial capital.

HEADINGS AND TITLES: Headings of chapters and titles of books are printed with capitals.

WORDS OF DISTINCTION: The words I and O should always be printed or written in capitals. Words denoting great events take the initial capital.

FIRST WORDS: The first word of every sentence begins with a capital. The first word of an independent expression begins with a capital. The first word of a line of poetry should begin with a capital. The first word of any important beginning takes the initial capital. The first word of a resolution takes the initial capital.

SOUND—

An elementary sound is one that cannot be divided.

CLASSIFICATION—

Letters are classified as vowels and consonants.

VOWELS—

Are letters which represent pure tone only.
The vowels are a, e, i, o and u.

CONSONANTS—

Are letters which represent tone more or less obstructed by the organs of speech.

The consonants are b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, w, x, y, z. (W* and y are vowels when not preceded by another vowel sounded in same syllable.)

A DIPHTHONG—

Is the union of two vowels sounded together in the same syllable.

A DIGRAPH—

Is the union of two vowels in one syllable only one of which is sounded.

A TRIPHTHONG—

Is the union of three vowels in one syllable representing a simple or compound sound.

A TRIGRAPH—

Is the union of three vowels in one syllable representing but one sound.

ELEMENTARY SOUNDS—

Are divided into vocals, sub-vocals and aspirates.

VOCALS—

Are those tones of voice which are unobstructed by the organs of speech.

SUB-VOCALS—

Are those tones of voice which are modulated by the organs of speech.

ASPIRATES—

Are those elementary sounds which are produced by the breath alone.

A MUTE—

Is a letter which represents no sound without the aid of a vowel.

The mutes are p, b, d, t, k and g.

A SEMI-VOWEL—

Is a letter which represents a sound without the aid of a vowel.

The semi-vowels are f, h, j, l, m, n, r, s, v, w, x, y, z, e and g, soft.

* It may be justly questioned, whether w, is ever a vowel. It certainly lacks one of the essential properties of a vowel, that is, of forming a syllable either alone or with consonants; which all the other vowels do.—*Wright*.

ORGANS OF SPEECH—

The lips, teeth, tongue and palate.

LABIALS—

Letters formed principally by the aid of the lips.

The labials are b, f, m, p, v, w and wh.

DENTALS—

Letters formed principally by the aid of the teeth.

The dentals are j, s, z, ch, sh, zh and c and g soft.

LINGUALS—

Letters formed principally by the aid of the tongue.

The linguals are d, l, n, r, t, y and th.

PALATALS—

Letters formed principally by the aid of the palate.

The palatals are k, q, x, ng, c and g hard.

DIACRITICAL MARKS—

Are characters used to represent the various sounds of letters.

The following table gives the character, name and position of the diacritical marks:

Table of Diacritical Marks.

MARK.	NAME.	WHERE USED.
(—)	Macron.	Over a, e, i, o, u, y, oo, under e and n.
(˘)	Breve.	Over a, e, i, o, u, y and oo.
(¨)	Dieresis.	Over a and i, under a, o and u.
(.)	Period.	Over a, o, g, under a, o and u.
(^)	Caret.	Over a, e, o and u.
(~)	Tilde	Over e, i and n.
(,)	Cedilla.	Under c.
(Ɽ)	Inverted T.	Under s and x.
(-)	Bar.	Across c and over g.

SPELLING—

Is the naming of the letters of a word in their proper order.

A SYLLABLE—

A letter or combination of letters uttered at a single impulse of the voice and composing the whole or a part of a word.

A WORD—

One or more syllables used as the sign of an idea.

A PRIMITIVE WORD—

One not derived from another.

A DERIVATIVE WORD—

One that is derived from another.

A SIMPLE WORD—

A single word.

A COMPOUND WORD—

One composed of two or more simple words.

ARITHMETIC.

DEFINITIONS—

A unit, a number, unit of a number, an integer, a concrete number. Scale—Uniform, varying, decimal. Unity, a solution, a problem, an example, an analysis, a rule, digits, cipher or zero, period, simple value, local value, equation, axiom.

Notation.

ROMAN—

Letters, value, principles.

ARABIC—

Figures—Value of figures, how increased, how diminished ; Periods, principles.

NUMERATION—

Periods, principles, rules.

Addition.

DEFINITIONS—

Sum or amount, parts, like numbers.

SIGNS—

Addition, equality.

PRINCIPLES—

Three.

RULE.

PROOF.

Subtraction.

DEFINITIONS—

Minuend, subtrahend, difference or remainder.

SIGNS.

PRINCIPLES—

Two.

RULE.

PROOF.

Multiplication.

DEFINITIONS—

Multiplicand, multiplier, product, factors.

SIGN.

THEOREMS—

Either factor for multiplier ; Product same name as multiplicand ; Multiplier always abstract.

PRINCIPLES—

Four.

RULES.

PROOF—

Division.

DEFINITIONS—

Dividend, divisor, quotient, remainder.

RELATION TO SUBTRACTION.

RELATION TO MULTIPLICATION.

SIGNS—

Three.

THEOREMS—

Quotient an abstract number ; Dividend and divisor like numbers ; Remainder same name as dividend.

PRINCIPLES—

Three.

RULES.

PROOF.

Properties of Numbers.

DEFINITIONS—

Integer, exact divisor, common divisor, greatest common divisor, prime numbers, numbers divisible by 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, composite numbers, even number, odd number, factors, factoring, multiple, common multiple, least common multiple, cancellation.

PRINCIPLES—

Four.

RULES FOR—

Multiples, divisors, prime factors.

Fractions.

DEFINITIONS—

Unit of a fraction, fractional unit, denominator, numerator, terms, value, analysis, proper, improper, simple, complex, compound, similar fractions, dissimilar fractions, common denominator, least common denominator, mixed number, reciprocal.

REDUCTION—

Fraction to a number, number to a fraction, higher terms to lower terms, lower terms to higher terms, compound to simple, dissimilar to similar.

ADDITION—

Like denominators, unlike denominators.

SUBTRACTION—

Like denominators, unlike denominators.

MULTIPLICATION—

Number by a fraction, fraction by a number, fraction by a fraction.

DIVISION—

Number by a fraction, fraction by a number, fraction by a fraction.

THEOREMS—

Common denominator a common multiple; least common denominator, least common multiple.

PRINCIPLES—

Four.

RULES.

Decimals.

DEFINITIONS—

Decimal point, mixed number, pure decimal number, complex decimal, circulating decimal, notation, numeration, reduction, debit and credit, debtor, creditor, an account, balance, bill of goods, footing of bill, item, receipting a bill.

REDUCTION—

Prefixing a cipher, annexing a cipher.

ADDITION.

SUBTRACTION.

MULTIPLICATION—

Number of decimal places in product.

DIVISION—

Number of decimal places in quotient.

RULES.

Denominate Numbers.

DEFINITIONS—

Concrete number, abstract number, simple, compound, standard unit, scale, money, coin or specie, paper money, reduction—ascending and descending, weight, measure ° of—length, surface and solid, time.

TABLES—

Linear measure, square measure, surveyor's square measure, cubic measure, board measure, liquid measure, apothecaries' liquid measure, dry measure, avoirdupois weight, troy weight, apothecaries' weight, measure of time.

RULES—

Percentage.

DEFINITIONS—

Per cent., sign, percentage, base, rate, amount, difference, interest, principal, legal interest, compound interest, usury, promissory note, per annum, annual interest, partial payment, indorsement, maker or drawer, payee, holder, indorser, face of a note, negotiable note, non-negotiable note, discount, net price, cash value, true discount, present worth, bank discount, check, proceeds, avails, maturity, profit and loss, commission,

DEFINITIONS—CONTINUED.

agent, consignment, consignor, consignee, tax, real estate, personal property, assessor, assessment roll, duties or customs, tare, leakage, breakage, custom-house, company, charter, capital stock, share, certificate, par value, market value, installment, bond, coupon, broker, brokerage, insurance, policy, exchange, set of exchanges, partnership, capital, resources, liabilities, deficit.

Ratio.

DEFINITIONS—

Terms of ratio, antecedent, consequent, sign, couplets.

PRINCIPLES—

Three.

Proportion.

DEFINITIONS—

Simple, compound, sign, antecedents, consequents, extremes, means, direct, inverse.

PRINCIPLES—

Three.

Involution.

DEFINITIONS—

Power, root, exponent, square, cube, perfect power.

PRINCIPLES.

Evolution.

DEFINITIONS—

Root, radical sign, perfect power, imperfect power, square root, cube root.

PRINCIPLES.

Progression.

DEFINITIONS—

Progression—Arithmetical and geometrical ; Series
—Ascending and descending ; Terms ; Ratio.

RULES.

Mensuration.

DEFINITIONS—

Line—Straight, curved, horizontal, perpendicular ;
 Parallel lines ; Angle—Right, obtuse, acute ;
 Area ; Perimeter ; Diagonal ; Altitude.

PLANE FIGURES—

(1) TRIANGLES—Right, isosceles, equilateral. Base multiplied by height and product divided by 2 gives area.

(2) QUADRILATERALS—

Parallelogram—Square, rectangle, rhomboid, rhombus. Base multiplied by altitude gives area.

Trapezoid—Sum of parallel sides multiplied by altitude and product, divided by 2, gives area.

Trapezium—Divide it into triangles and find the sum of their areas.

(3) POLYGONS—Pentagon, hexagon, heptagon, octagon. Divide into triangles and find the sum of areas.

CIRCLES—

DIAMETER multiplied by—

3.1416=circumference.

.8862=side of an equal square.

.8860=side of an inscribed equilateral triangle.

.7071=side of an inscribed square.

CIRCUMFERENCE multiplied by—

.3183=diameter.

.2756=side of an inscribed equilateral triangle.

.2251=side of an inscribed square.

.15915=radius.

AREA multiplied by—

1.2732=square of diameter.

12.5663=square of circumference.

SOLIDS—

PRISM ; PARALLELOPIPEDON ; CYLINDER—Perimeter of base multiplied by altitude gives volume.

PYRAMIDS AND CONES—Perimeter of base multiplied by one-half slant height gives convex surface ; area of base multiplied by one-third the altitude gives volume.

SPHERES—

Diameter multiplied by—

Circumference=surface.

.5774=side of inscribed cube.

Surface multiplied by—

1.6 diameter=volume.

PENMANSHIP.

By Mrs. L. F. Wallbrecht,

POSITIONS—

Of the person—Body, feet, arms, wrists, hands, fingers. At desk or table, sitting or standing—Front, right, right oblique, left. Of pen—(See Penholding.) Of paper—Adjust book so that right arm will be at right angles to lines on paper.

PENHOLDING—

Take the pen between the first and second fingers and the thumb. The holder should cross second finger at corner of nail, three-fourths of an inch from point of pen. Cross forefinger forward of knuckle. End of thumb should touch holder opposite lower joint of forefinger. Top of holder should point toward right shoulder. Wrist should be above paper, hand resting lightly on nails of third and fourth fingers. Point of pen should come squarely to paper.

MOVEMENT—

Whole arm, forearm, finger, combined.

PRINCIPLES—

Straight line, right curve, left curve, extended loop, direct oval, reversed oval, capital stem.

SLANT—

Main, 52 degrees ; connective, 30 degrees.

LINES—

Top line—Line to which the loop or extended letters extend. Intermediate line—Line to which semi-extended letters reach. Head line—Line to which small letters extend. Base line—Line on which the writing rests.

SPACE—

Height—The unit for measuring the height of letters is small letter i without dot. Width—The unit for measuring width of letters is the distance between the two straight lines of small w taken horizontally.

FORM—

Small—Short, 13 ; semi-extended, 4 ; extended or loop. Capital—In which capital O is most prominent, 4 ; in which reversed oval is most prominent, 9 ; in which seventh principle is most prominent, 13.

CONSTRUCTION—

Angles—Upper, lower. Turns—Upper, lower. Slants—Main ; Connective—Right curve, left curve.

SPACING—

One and one-fourth space between all letters except a, d, g, q, two spaces. One and one-half spaces between words. Twice as great between sentences as between words.

PHYSIOLOGY.

ANATOMY—

Is the science of the structure of the body. Called human anatomy when applied to man, and comparative anatomy when applied to animals.

PHYSIOLOGY—

Is the science of the functions of the body. Called human physiology when applied to man, and comparative physiology when applied to animals.

HYGIENE—

Is the science of the laws of health.

ORGANIC BODIES—

Animals and plants—Possess organs by which life is maintained and growth is secured.

INORGANIC BODIES—

Minerals—Are destitute of organs, and grow only by additions to their surfaces.

HEALTH—

Is a natural condition of the bodily organs.

DISEASE—

Is an unnatural condition of the bodily organs.

Bones.

USES—

- (1) Framework of the body ; (2) Protection to delicate organs ; (3) Levers upon which the muscles act to produce motion.

COVERING—

A fibrous membrane called periosteum.

COMPOSITION—

- (1) Animal matter, to impart elasticity ; (2) Mineral matter, solidity.

PROPERTIES—

- (1) Porosity, to give greater size for the formation of joints and attachment of muscle ; (2) Hardness, to give strength.

NUMBER AND CLASSIFICATION—

HEAD (28 bones)—

Cranium (8 bones)—Frontal, occipital, 2 parietal, 2 temporal, sphenoid, ethmoid.

Face (14 bones)—2 superior maxillary, inferior maxillary, 2 malar, 2 lachrymal, 2 turbinated, 2 nasal, vomer, 2 palate.

Ear (6 bones)—2 malleus or “mallet,” 2 incus or “anvil,” 2 stapes or “stirrup.”

TRUNK (54 bones)—

Spinal Column (24 bones)—7 cervical vertebrae, 12 dorsal vertebrae, 5 lumbar vertebrae.

Ribs (24 bones)—True, false.

Sternum.

Os Hyoids.

PELVIS (4 bones)—

The innominate or hip bones, sacrum, coccyx.

LIMBS (124 bones)—

Upper Limbs (64 bones)—

Shoulder—Clavicle, scapula.

Arm—Humerus, ulna, radius.

Hand—Eight wrist or carpal, 5 metacarpal, 14 phalanges.

Lower Limbs (60 bones)—

Leg—Femur, patella, tibia, fibula.

Foot—Seven tarsal, metatarsal, 14 phalanges.

Muscles.

CLASSES—

- (1) Voluntary, those under the control of the will ;
- (2) Involuntary, those not so controlled ; (3) Flexors, those which bend the joints ; Extensors, which restore the parts to a straight condition.

USES—

- (1) To give form and symmetry to the body ; (2) To produce its various movements.

NUMBER—

There are only twelve single muscles in the body, while the number arranged in pairs exceeds four hundred.

PROPERTIES—

- (1) Contractibility, the power of shortening their substance to produce motion ; (2) Relaxation, resuming their natural form.

EXERCISE—

Time, not immediately after eating, nor after long abstinence from food.

TENDONS—

Are fibrous non-contractile tissues, in which the fibres of muscles terminate.

Digestion.**DIGESTION—**

Includes all those processes by which food becomes converted to the wants of the system.

ORGANS OF—

Mouth—Cavity containing the organs of mastication and taste.

Teeth—Organs of mastication.

Tongue—Assists in mastication.

Salivary Glands—Secrete the saliva ; (1) Parotid ; (2) Submaxillary ; (2) Sublingual.

Pharynx—Cavity in the back of the throat into which the esophagus and trachea open.

Esophagus—Membranous tube through which food and drink are conveyed to the stomach.

Stomach—An enlargement of the alimentary canal. It is composed of three coats and has two openings, cardiac from the esophagus and pylorus to the intestines.

Intestine—A continuous canal leading from the stomach.

Pancreas—A gland situated near the stomach which secretes the pancreatic juice.

Thoracic Duct—A long canal which conveys the chyle to the veins of the neck.

Liver—The largest gland of the body. Its office is to secrete the bile.

PROCESS OF—

Mastication—The cutting and grinding of the food by the teeth.

Insalivation—Mixing of the food with saliva.

Deglutition—The act of swallowing.

Chymification—The conversion of food into chyme.

Chylification—The separation of the chyme and the formation of chyle, the nutritious part of food

Assimilation—The conversion of chyle into the living tissues of the body.

FOOD—

Nitrogenous—Contains much nitrogen, an essential constituent of the tissues of the body.

Non-nitrogenous—Sugars and fats, essential to the formation of every organ, and aids in digestion.

Inorganic—Such as water, salt, iron, etc.

Respiration.

RESPIRATION—

Is the process by which venous blood is purified or changed into arterial blood.

ORGANS OF—

Larynx—A cartilaginous box at the top of the trachea across which are stretched the vocal cords.

Trachea, or Windpipe—A straight tube which conveys the air to the lungs. It divides into right and left *bronchial tubes*, which also divide and subdivide each division, and terminates in an oval sac into which the air penetrates.

Lungs—The principle organs of respiration.

Pleura—A delicate membrane covering the lungs.

MOVEMENTS OF—

Inspiration—Taking air into the lungs.

Expiration—Expelling air from the lungs.

OBJECTS OF—

(1) To impart oxygen to the blood.

(2) To relieve the blood of carbonic acid and watery vapor.

Circulation.

CIRCULATION—

The continuous movement of the blood from the heart to repair the system, and its return to the heart and lungs to be purified by respiration.

ORGANS OF—

Heart—Is a cone-like muscular organ which keeps the current of blood in motion. It contains four cavities, right and left auricles, right and left ventricles. It is lined by a thin membrane called endocardium, and covered by another called pericardium.

Arteries—Tube-like canals which convey the blood from the heart to nourish the system

Veins—The vessels by which the blood returns to the heart.

Capillaries—Minute vessels connecting the arteries and veins.

BLOOD—

Kinds—Arterial, a bright red, pure and fit for the support of the tissues. Venous, a dark blue, impure and charged with effete materials.

COMPOSITION—

Plasma—A colorless fluid richly charged with materials derived from the food.

Corpuscles—Minute solid bodies that float in the watery plasma. They are of a yellow color, but their vast number imparts a red hue to the blood.

Nervous System.

FUNCTIONS—

The source of sensation and of all muscular motion.

BRAIN—

The organ of thought.

Composition—Gray matter, which originates nervous power; white, which conveys it.

DIVISIONS—*Cerebrum*, a mass of white fibres with a few cells of gray. It comprises about seven-eighths of the weight of the brain, and is the center of intelligence.

Cerebellum, "little brain"—The center for the control of the voluntary muscles.

Medulla Oblongata—The enlarged portion of the spinal cord. It lies within the skull.

Spinal Cord—A cylindrical mass of nervous tissue which occupies the cavity of the back bone.

Dura Mater—A dense, firm membrane lining the inner surface of the skull.

Pia Mater—A very delicate membrane, the means of entrance of the blood-vessels into the brain.

BRAIN—CONTINUED.

Arachnoid Membrane—A serous membrane lying between these. It serves as a protecting envelope to the brain, and at the same time, by its serum, keeps it moist.

Nerves—Silvery threads composed of white matter without and gray within. They connect all the organs with the brain and spinal cord, and have two distinct sets of fibres, sensory and motor.

Cranial Nerves—Start from within the skull. There are twelve pairs.

Spinal Nerves—Issue from the spinal cord. There are thirty-one pairs: 8 cervical, 12 dorsal, 5 lumbar and 6 sacral.

Sympathetic Nerves—These extend from a double chain of ganglia on either side of the back bone to the heart, lungs, stomach, etc.

Special Senses.

SIGHT—

The special senses by which we recognize form, size, distance and physical properties of objects. Hyperopia, long sight, and presbyopia, old sight, may be corrected by using convex glasses. Myopia, short sight, by using concave glasses.

EYE—

The organ of vision is composed of three coats: *Sclerotic*, which gives form and firmness; *Choroid*, absorbs superfluous light; *Retina*, expansion of optic nerve.

Orbits—The bony sockets of the head in which the eyes are situated.

Eyelids—Two movable curtains which, when closed, cover the front part of the orbit.

Lachrymal Glands—Secrete the tears which keep the surface clear and transparent.

Cornea—The thin, transparent part of the sclerotic coat.

Iris—The colored curtain which lies back of the cornea.

Pupil—The circular opening of the iris.

Crystalline Lens—Concentrates the rays of light, and is situated just behind the pupil.

Aqueous Humor—A water-like liquid lying between the crystalline lens and cornea.

Vitreous Humor—A transparent jelly-like mass lying behind the lens.

Optic Nerve—The means of communication between the eye and brain.

HEARING—

The special sense by which we appreciate sound and its qualities.

EAR—

The organ of hearing. It consists of three parts:

External Ear—Which includes the *concha* or shell for catching sound, and the *auditory canal*, a tube about an inch long closed at its inner end by the membrane of the tympanum.

Middle Ear—A cavity, the tympanum, separated from the external ear by the membrane of the tympanum. It contains three little bones, “mallet,” “anvil” and “stirrup.” Air is admitted to the tympanum by means of the eustachian tube, which leads to the back of the throat.

Internal Ear—or Labyrinth—Consists of three parts, the vestibule, semi-circular canals and cochlea.

SMELL—

The special sense by which we appreciate odors.

Uses of—(1) The selection of food, and (2) to warn us of impure air.

Location—The location of this sense is in the mucous membrane which lines the nose.

Olfactory Nerves—Or the first pair of cranial nerves, are the special nerves of smell.

Nasal Passages—Two high narrow canals extending from the nostrils to the top of the pharynx. The inner wall of each passage is straight, but the outer is made uneven by three small turbinated or scroll-like bones.

TASTE—

The special sense by which we appreciate flavors.

Uses of—(1) The selection of food, and (2) excites the flow of saliva.

Location—We receive impressions of taste through the gustatory nerve of the anterior portion of the tongue, or through the glosso-pharyngeal nerve.

TOUCH—

The special sense by which we appreciate the form, heat, cold, etc., of external objects by contact.

Uses of—Assists the other senses.

Location—In all parts of the body, especially at the tips of the fingers.

Muscular Sense—That which enables us to estimate the weight of bodies.

Thermal Sense—That which enables us to ascertain the temperature of bodies.

Alcohol.

DEFINITIONS—

Alcohol—The active and intoxicating principle of all fermented liquors.

Stimulant—An agent that produces an increase of vital activity in the body.

Narcotic—An agent that produces sleep, stupor, paralysis, and often death.

ORIGIN OF—

Fermentation—The change which takes place in the elements of an organic substance under the influence of a decomposing agent called a ferment.

Distillation—The separation of fluids that boil at different temperatures by evaporating one and again condensing it.

SOURCE OF—

Sugar and starch, or any substance containing saccharine matter.

PROPERTIES OF—

A colorless fluid of an agreeable odor and strong, pungent taste. Its chemical proprieties are carbon, hydrogen and oxygen; in commercial or ethylic alcohol, there are two parts carbon, six hydrogen and one oxygen. It has a great affinity for water, absorbing it from the atmosphere. It is very inflammable, burning with a pale bluish flame without smoke. It is a powerful solvent, and employed in medicine in the preparation of tinctures and in the arts to dissolve resins, gums, oils, etc. It boils at 173° F. and no degree of cold ever yet obtained has effected its congelation. Its antiseptic properties prevent chemical change in organic substances.

EFFECTS OF—

On Nervous System—Alcohol mainly selects the cerebro-spinal nervous system for its great center of action; the nerves of motion are especially affected. The cerebrum and cerebellum become hardened by its use and the cerebral arteries in a state of fatty degeneration.

On Digestion—The chemical action of alcohol is to prevent change in organic substances, which is the work of digestion from first to last. It is indigestible, and is taken up by the absorbents and carried into the blood. Its circulation through the lungs gives the one who drinks the "whiskey breath."

EFFECTS OF—CONTINUED.

On the Stomach—It becomes congested and greatly wrinkled, as if a powerful astringent had been taken; the mucous membrane becomes white, and thickened; or softened and covered with a mucopurulent secretion.

On the Blood—It becomes fluid and venous by the separation of the plasma, increases in carbon and hydrogen, contains less oxygen and but little fibrin, which accounts for its non-coagulating property.

On the Mind—The general effects are confusion of thought, loss of memory, various mental affections, varying with individual character, less power of self control and loss of moral power.

On the Muscular System—The influence of alcohol is to lessen the amount of carbonic acid exhaled from the lungs, and to diminish muscular force in the same ratio.

On the Special Senses—It produces hallucination of sight by seeing things double or a variety of objects, indicating that it especially affects that portion of the brain that gives rise to the *optic nerve*. *Taste and smell* are impaired by its influence upon the mucous membrane.

On the Brain—It hardens and impairs its delicate texture, blunts the finer sensibilities, and man loses the power of self-control, self-respect, descending step by step in intellectual and moral power.

On the Heart and Liver—The superior affinity for oxygen, which alcohol possesses, prevents the proper elimination of effete matter, thus producing fatty degeneration of these organs.

Transmitted Effects—The diseased condition of the system, induced by the stimulating and narcotic effects of alcoholic drinks, must reproduce in the child the characteristic tendencies of the parent.

On the Temperature of the Body—"For a few minutes after alcohol is administered, to the amount of a gill of wine or brandy, the temperature rises slightly, after which it falls several degrees below the standard of health, and remains so for hours."

—W. B. CARPENTER.

"It is doubtful if another single agent can be named, which, introduced into the system from without, has been the occasion of a greater amount of disease, mental decay and premature death."

—J. C. HUTCHINSON, M. D.

EFFECTS OF—CONTINUED.

The alleged protection against extremes of heat and cold has been thoroughly disproved by Dr. Hayes and other Arctic explorers.

The effect upon the human system, the transmission of its evil consequences, and many other reasons confirm the words of the wise man.—Prov. xx. 1.

Tobacco.

TOBACCO—

An American plant. Its poisonous property is due to the active principle nicotine, a most deadly poison.

EFFECTS OF—

On the Nervous System Tobacco acts especially on the cerebro-spinal centers, affecting mainly the medulla oblongata and pneumogastric nerve.

The sensory nerves are dulled, the motory nerves paralyzed, which produces a relaxation of the muscular system.

On Digestion. Tobacco swallowed with saliva prevents change in organic substances, diminishes the desire for food, produces indigestion and constipation.

On the Blood. It becomes fluid, venous and non-coagulating.

On the Mind. The general effects are loss of will power, of memory, and the mental perceptions are impaired. The pernicious effects are especially noticed upon young people, persons of sedentary habits and to those devoted to mental pursuits.

On the Heart.—The effect is to produce irregularity of action, and has a tendency to produce fatty degeneration.

THEORY AND ART OF TEACHING.

(SELECTED AND ARRANGED.)

THEORY AND ART OF TEACHING—

The principles and methods of instruction.

DIVISION OF SUBJECT—

Will here be used as (1) the *organization* and (2) the *management* of schools.

ORGANIZATION.—

The systematic arrangement of school work ; having for its object the instruction and control of the schools.

A good organization of a school is an essential condition to its healthful management.

DIVISION—

School organization may be divided as (1) temporary, and (2) permanent.

TEMPORARY ORGANIZATION—

Includes (1) preparatory work, (2) examination, and (3) classification of pupils.

PREPARATORY WORK—

Will be considered under the following: (1) The teacher, (2) the school, (3) contract, and (4) plan of work.

THE TEACHER—

"As is the teacher, so is the school." The great want everywhere is competent teachers.

QUALIFICATIONS—

(1) Health, (2) Knowledge, (3) Tact, and (4) Moral.

HEALTH—

The teacher should be free from all bodily ailments.

A strong, healthy, and temperate physical fiber is necessary to a healthy, growing mental condition. There is no profession so exacting, none that breaks men and women down so early as that of faithful teaching.

"The cheerfulness, the vigor, the versatility, and the endurance essential to success can only come of good health."

KNOWLEDGE—

To teach well, one must be a master of the subject. He ought also to be conversant with cognate branches. The true teacher is always a student.

TACT—

No word in our language expresses a greater power to the teacher than this *tact*. The ready power of appreciating and doing what is required by circumstances. The accumulation of knowledge and experience add to this original divine power. A knowledge of the laws of culture, of right methods of teaching, and of true school manage-

TACT—CONTINUED.

ment quickens and deepens this gift of intuition. "The most scholarly teachers often make the most striking failures; they know, but they cannot cause others to know. The teacher needs to observe, read, think, practice. He needs to sit at the feet of Jesus, of Aristotle, of Socrates, and of Pestalozzi, and learn lessons from the masters."

MORAL—

High moral qualities are necessary in the teacher as they affect his power over his pupils.

The teacher is the architect of the character of his pupils.

The moral nature that is bound down by low and sensuous affections and purposes, lacks at all times that ready, sensitive, insinuating grace and freedom of action, which draw the youthful mind into ways of purity, temperance and personal excellence.

THE SCHOOL—

Only engage in such schools as you can manage and hold.

Do not attempt too much. You can afford to work up. The best positions await talent and well directed effort. Prove yourself worthy the place, and the position will seek you. Seek that place which will require all your powers and to which you can gladly devote your best efforts.

THE CONTRACT—

Teaching is a business, and teachers should meet School Boards on business principles. The contract should be in writing, and should specify time, wages, care of house, grounds and apparatus.

PLAN OF WORK—

Prepare your *plan of work* carefully. Have and keep your school room clean, orderly and cheerful. Look after the minutest details which promise success. Give your best thoughts to the *course of study* and *programme*. See that it is well arranged before you enter upon your work. Have your plans well matured before the first day. Do your best and you will not fail.

EXAMINATION—

To determine the grade and class to which pupils belong, the method must be left to the judicious teacher.

The natural ability and attainments of the pupil must both be considered.

CLASSIFICATION—

Here as in examination the judgment of the teacher must determine the place, the age, ability and scholarship of the pupil must be considered. The proper place for each pupil should be found.

PERMANENT ORGANIZATION—

Includes (1) opening exercises, (2) programme, (3) study, (4) recitation, (5) intermission, and (6) closing exercises.

OPENING EXERCISES—

These should be brief, pleasing, and directed toward moral culture. Do not have stereotyped forms for opening. Call the roll by number—each pupil announcing his number in order.

PROGRAMME—

A carefully prepared programme should be found in every school room.

STUDY—

The pupil is helped more by what he *thinks* himself than he is by what others tell him. The teacher should never do for the pupil what he can do for himself. Teach pupils *how* to study. Our success as teachers depends more upon this than any other school duty.

RECITATION—

The object of recitation is two-fold. (1) as aids, and (2) as tests.

AIDS—

The first, and most important work of every recitation should be to teach how to study, to train to the habit of clear and correct forms of speech, to cultivate a love for study and to impart supplementary knowledge.

TESTS—

To ascertain the extent of the pupil's preparation. The certainty that the preparation will be thoroughly tested is a powerful incentive to study.

See that the lesson is well understood and remembered. If possible let each lesson reach back to the beginning. Study well the art of questioning.

INTERMISSION—

The organization of the school should provide for and the programme should show time set apart for recreation.

CLOSING EXERCISES—

These, like the opening should be brief, announcements should be short if any are to be made. A song, dismissal by rank, pupils marching in order.

SCHOOL MANAGEMENT—

The systematic control of school work so as to produce order and efficiency.

DIVISION—

(1) School Tactics ; (2) School Government ; and
(3) School Work.

SCHOOL TACTICS—

A uniform system of signals and movements for school work. The appearance and success of a school is largely dependent upon a well digested and faithfully executed plan of school tactics.

SIGNALS—

Counting, tapping the bell and naming the movement. The signals used should be few and simple.

MOVEMENTS—

These should be necessary and executed promptly and quietly. Sufficient time should be allowed between signals to admit of their prompt execution.

SCHOOL GOVERNMENT—

Control exercised by a teacher over his school. This should always tend toward self-government. The order sought in school government should be that of activity and work. The most difficult part of a teacher's work is the control or management of his school and calls for experience, judgment and wisdom.

DIVISION—

(1) Objects and (2) Means.

OBJECTS—

(1) To preserve order, (2) to facilitate instruction and (3) to form correct habits.

TO PRESERVE ORDER—

“Order is Heaven's first law.” “The fitness of condition and results from good government.”

TO FACILITATE INSTRUCTION—

Good school government lessens the labor of instruction and makes successful school work possible.

TO FORM CORRECT HABITS—

The school is to train the pupil for life and not for school. Good character and correct habits are of more importance than good scholarship.

MEANS—

Classified as (1) Mental and (2) Punishments.

MENTAL—

Some of the mental powers used in the government of a school are culture, system, earnestness, watchfulness, will-power, self-control and tact. Each of these should be a special study for the teacher and the question asked: Do I possess these qualities which promise success?

PUNISHMENTS—

Are of two kinds, (1) Moral and (2) Corporal.
"The best teachers punish least."

MORAL—

Conscience and the affections are fields in which the true teacher labors and by which he largely governs. Train the child to do right because it is right. Inculcate right motives and right actions will follow. Reproof—public and private, given in the proper spirit is an effective means for the correction of mis-doing. Restraints, such as depriving of privileges in school or in play. Threats are unworthy the teacher.

CORPORAL—

The teacher is required to keep good order and if necessary he is allowed, by usage, to inflict corporal punishment. It should never be used except in cases of extreme necessity. When resorted to it should be humane and done in love, not anger. Avoid all "boxing or pulling of the ears," use the rod if you must.

SCHOOL WORK—

(1) Study and (2) Recitation.

STUDY—

Study stands at the head of educational forces. The teacher's principal work is to train pupils how to study. "Study to know, not to recite."

RECITATION—

Stands next in importance to study and forms the chief work of the school room and should be well understood.

METHODS—

- (1) General and (2) Special.

GENERAL—

- (1) By question and answer.
- (2) By topic—Diagrams, outlines and analysis.
- (3) By lectures and essays.

SPECIAL STUDIES—

HISTORY—In teaching history from events—facts—trace the causes that have contributed to produce them. The teacher should have in view the culture of the moral as well as mental faculties of the child, and no field is more prolific in resources than history. Prepare for citizenship, use outlines, connect events to aid the memory.

CIVIL GOVERNMENT—In a Republican form of government it is essential to have a knowledge of the fundamental principles upon which the safety and perpetuity of its institutions rest. In teaching do not attempt too much; have a well defined plan, use the outlines, omitting parts or adding to them as the advancement of your pupils demand.

GEOGRAPHY—In the study of geography the Primary should be mastered before attempting the Advanced.

PRIMARY—In teaching primary geography the instruction should be objective. Begin at home. Teach direction, distance, boundaries. Study the vegetation, animals and minerals. Find lessons in the industries of the world.

ADVANCED—In the study of advanced geography begin with the world as a whole, and study from the whole to its parts, the size, form and position. Explain causes of volcanoes, earthquakes, hot springs, ocean currents, etc. Call attention to location of cities, prosperity of nations, why?

READING—This is one of the most important branches in our schools. Teach pupils to pronounce words at sight. "Conversation is the basis of good reading." Attend carefully to articulation and pronunciation. Study to have the expression correct.

ARITHMETIC—(See outline.) The fundamental branches should be thoroughly taught if you would have after results satisfactory. Teach accuracy, neatness and rapidity. Prepare pupils for actual business life.

Suggestions.

Set a good example.

Make the school room pleasant and its work attractive.

Do not threaten or scold.

Have a well defined plan and follow it faithfully.

Cultivate good morals and gentle manners.

Take and read some good school journal.

Own and read some good work on teaching.

Attend Institutes and Associations.

Make yours a model school.

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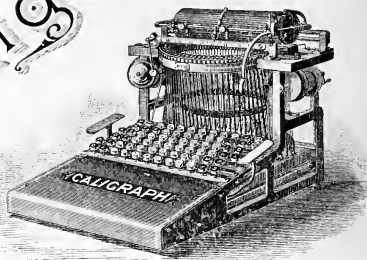
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